

REVIEW OF 2014

The year 2014 began with a good deal of uncertainty which never really let up. Despite the uncertainty surrounding the impacts of a government shutdown, severe winter weather, slow economic growth in Europe and Japan, 2014 saw the U.S. airline industry post solid results. The changes that U.S. carriers have made since the start of the global recession in 2008 helped the industry to make a profit for the fifth year in a row. Many industry professionals see these changes as providing traction towards profitability, even during future periods of uncertainty. The biggest change that U.S. passenger airlines have made is the shift in focus from increasing market share to one of boosting shareholder return on investment. The U.S. airline industry has become more nimble adjusting capacity either upward or downward to seize opportunities or minimize losses. U.S. airlines have developed additional revenue streams such as charging fees for services that used to be included in airfare (e.g. meal service), as well as for charging for services that were not previously available (e.g. premium boarding and fare lock fees). The impact from these initiatives gives reason for optimism as the industry (passenger and cargo carriers combined) posted profits for the fifth consecutive year in 2014.

Demand for air travel in 2014 grew at a modest pace amid an improving economic environment in the U.S. In 2014² system revenue passenger miles increased 2.5 percent as enplanements increased 2.3 percent. Commercial air carrier domestic enplanements were up by 2.1 percent, while international enplanements were up 3.4 percent. The system-wide load factor rose to 83.4 percent (up 0.2 points from 2013). Domestic enplanement market share continued to rise for low-cost, network, and “other” carriers in 2014 while regional carrier share decreased. Domestic low cost carrier enplanement share increased by 0.3 points to 29.5 percent, while the share of network and “other” carriers rose by 0.4 points to 47.4 percent. Regional carrier share dropped by 0.8 points to 23.0 percent.

Improving yields helped by continued capacity restraint by the carriers helped boost industry profits in FY 2014. Data for FY 2014 show that the reporting passenger carriers had a combined operating profit of \$14.9 billion (compared to a \$9.6 billion operating profit for FY 2013). The network carriers reported combined operating profits of \$11.1 billion while the low cost carriers reported combined operating profits of \$3.2 billion, with all carriers posting profits.

The general aviation market showed improvements in business jet and single engine piston segments, while declines in turboprop and multi-engine piston markets translated into a slight overall improvement. Overall deliveries were up by 1.0 percent in calendar year (CY) 2014; with a 5.6 percent increase in U.S. billings. Single engine piston shipments were up for the third year in a row, by 6.2 compared to the previous year. Because of a 10.0 percent decrease in the smaller multi-engine category, total piston aircraft shipments by U.S. manufacturers went up by 4.5 percent. Business jet shipments increased by 12.3 percent. However, an 11.2 percent decline in the turboprop deliveries generated a 2.1 percent decrease in turbine aircraft

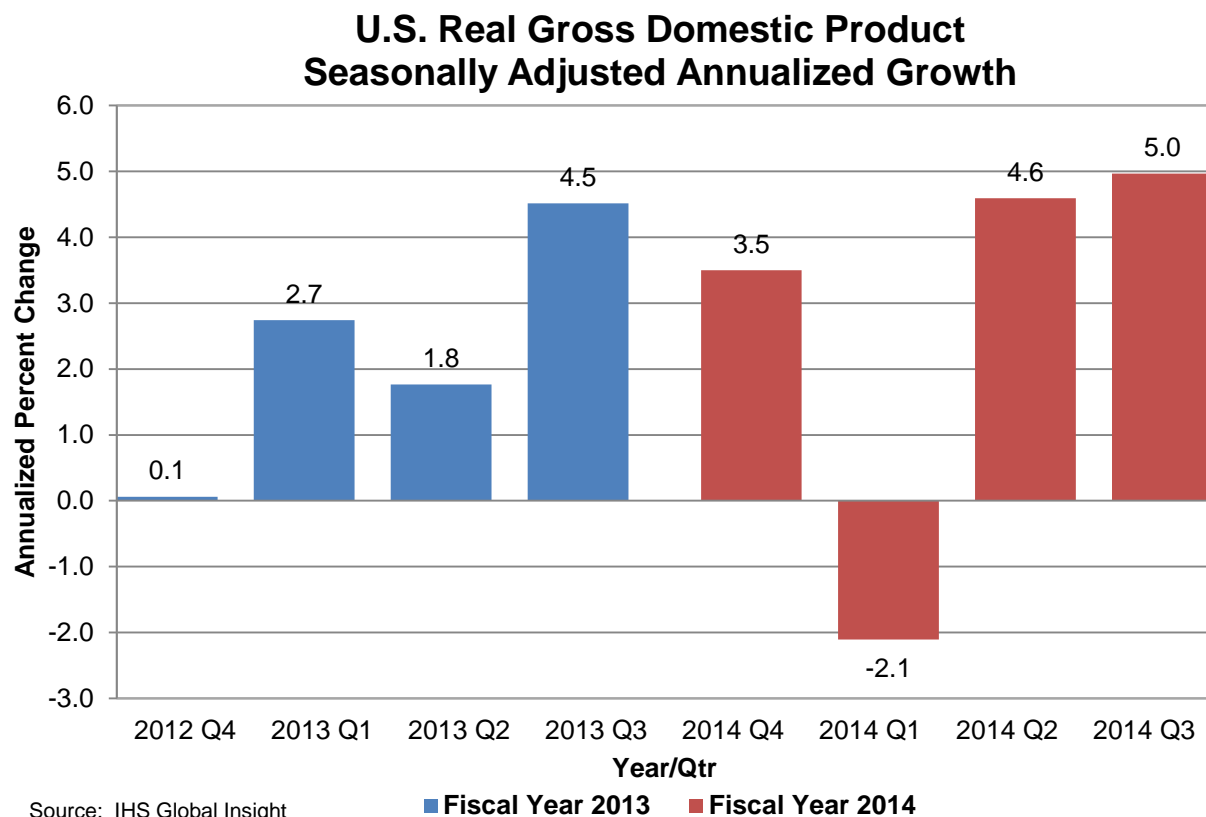
² All stated years and quarters for U.S. economic and U.S. air carrier traffic and financial data and forecasts are on a fiscal year (FY) basis (October 1 through September 30). All stated years and quarters for international economic and world traffic and financial data are on a calendar year (CY) basis, unless otherwise stated.

shipments (total of turboprop and business jets) by U.S. manufacturers in CY 2014. Turboprop shipments, which had increased by 13.8 percent in 2013, were nearly back to their 2012 levels. General aviation activity at FAA and contract tower airports recorded a 1.1 percent decline in 2014, which was caused by a decrease in itinerant activity; local operations were slightly down (0.6 percent) compared to previous year.

Total operations at FAA and contract towers fell again in 2014 by 0.9 percent, as activity declines in the air taxi, general aviation, and military categories offset an increase in air carrier activity. Activity at large hubs fell by 0.5 percent, while medium hubs and small/non hub airports saw declines of 1.6 percent and 0.9 percent, respectively. With increasing numbers of regional and business jets in the nation's skies, fleet mix changes, and carriers consolidating operations in their large hubs, we expect increased activity growth which has the potential to increase controller workload.

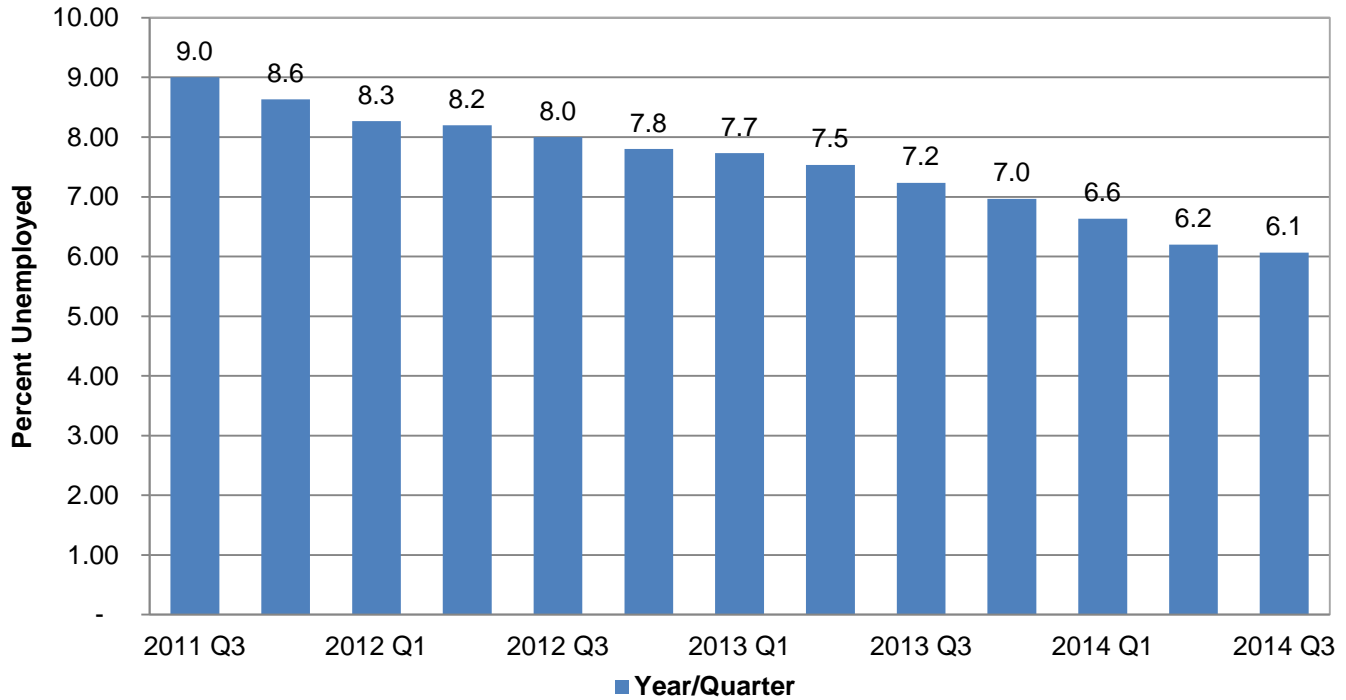
U.S. ECONOMIC ACTIVITY

U.S. economic performance in 2014 continued to be mixed with modest growth in real GDP and real incomes, a falling unemployment rate, and oil prices and consumer inflation remaining in check. The economy grew at an average annual rate of 2.6 percent in fiscal year (FY) 2014 after expanding 1.8 percent in FY 2013. GDP growth was strong in the second half of the year after shrinking in the second quarter due to the negative effects of the polar vortex. There were favorable signs in the data as the stock market entered record territory, and the labor market saw steady improvement with almost 2.8 million new jobs created during the year, the best figure since 1999.



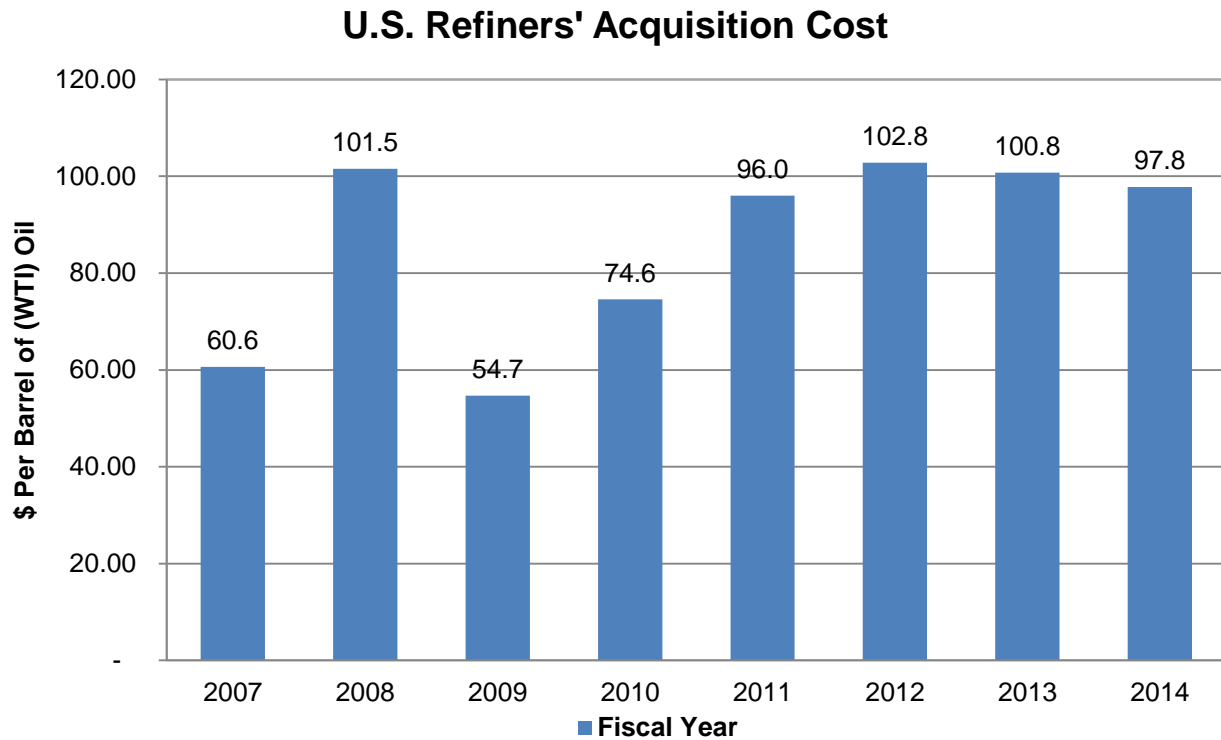
Much had been written about the weak rate of job creation and the slow improvement of the nation's unemployment rate during the course of the current economic recovery. In FY 2014, the rate of job creation picked up, and the improvement in the labor market was reflected in the falling unemployment rate. At the beginning of FY 2014, the nation's unemployment rate stood at 7.2 percent and steadily fell throughout the year, falling to 5.9 percent in September 2014, a 1.3 point decline over the course of the year, the largest annual decline in the current expansion.

U.S. Civilian Unemployment Rate



Source: IHS Global Insight, 10 Year Baseline Forecast

The price of oil, as measured by the U.S. Refiners' Acquisition Cost (for West Texas Intermediate, or WTI), remained relatively stable in FY 2014, averaging \$97.76 per barrel, down 3.0 percent from the FY 2013 figure of \$100.78.



Source: IHS Global Insight, 10 Year Baseline Forecast

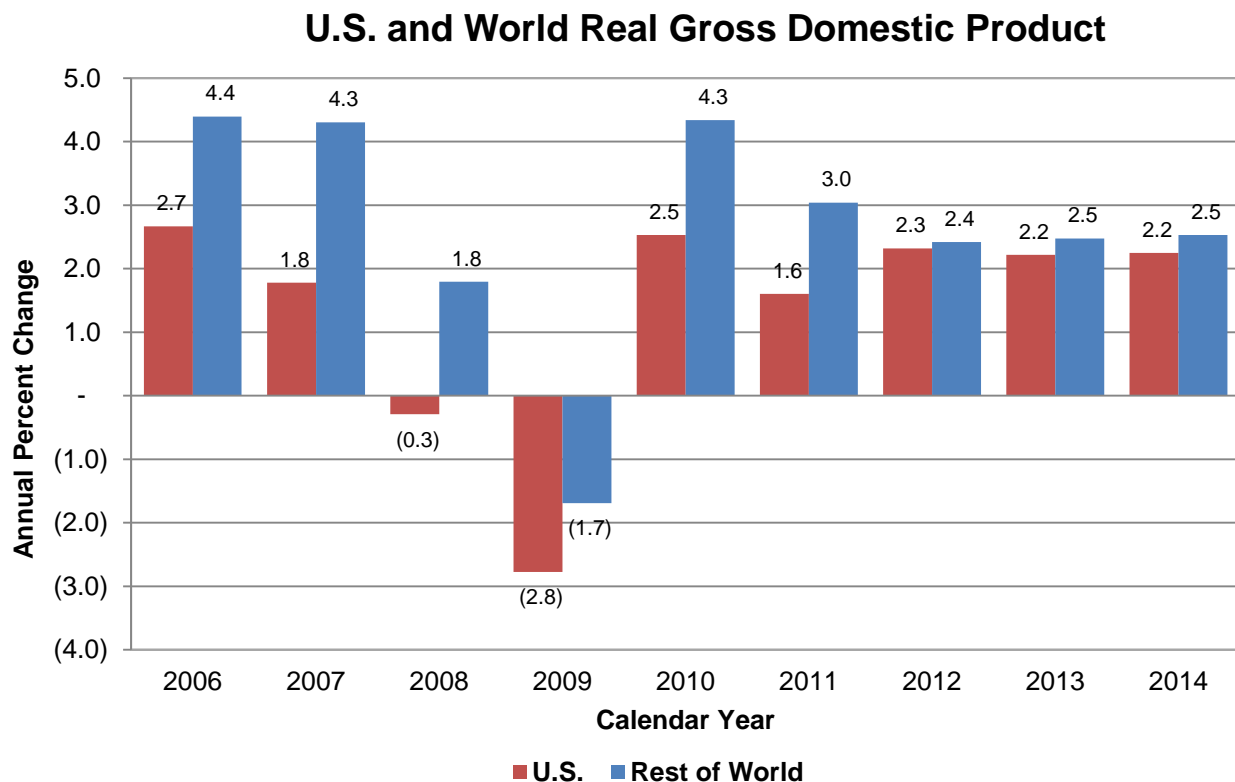
Finally, consumer prices increased at a modest rate in 2014. Core inflation (excluding food and energy) was moderate (1.7 percent); while headline inflation (including food and energy) was up 1.6 percent as energy prices increased just 0.4 percent.

WORLD ECONOMIC ACTIVITY

Based on preliminary figures,³ the U.S. and rest of the world economies both grew 2.5 percent in 2014. The advanced economies (U.S., Western Europe, Japan, Australia, New Zealand, and Canada) expanded 1.7 percent overall.

All world regions saw their economies grow. The combined economies of the Asia-Pacific region grew the fastest (4.3 percent), Europe (1.4 percent) and the U.S. had only moderate growth, while Latin America and the Caribbean had the lowest growth (0.9 percent) Among the countries with the largest economies, China, India and Indonesia grew the fastest (7.3, 5.9 and 5.1, respectively) while Japan only grew 0.2 percent. In Europe, Ireland had the largest growth at 5.0 percent, followed by Poland at 3.3 percent. Canada slightly edged out the U.S. at 2.4 percent.⁴

Overall, the Asia-Pacific, region excluding Japan, is still the world leader in GDP growth (5.7 percent), followed by Sub-Saharan Africa (4.5 percent), then Central Europe and the Balkans (2.6 percent). The Non-OECD countries (4.1 percent) had an almost four fold increase over the OECD countries (1.7) in 2014.⁵



Source: IHS Global Insight

³ IHS Global Insight.

⁴ Ibid.

⁵ Ibid.

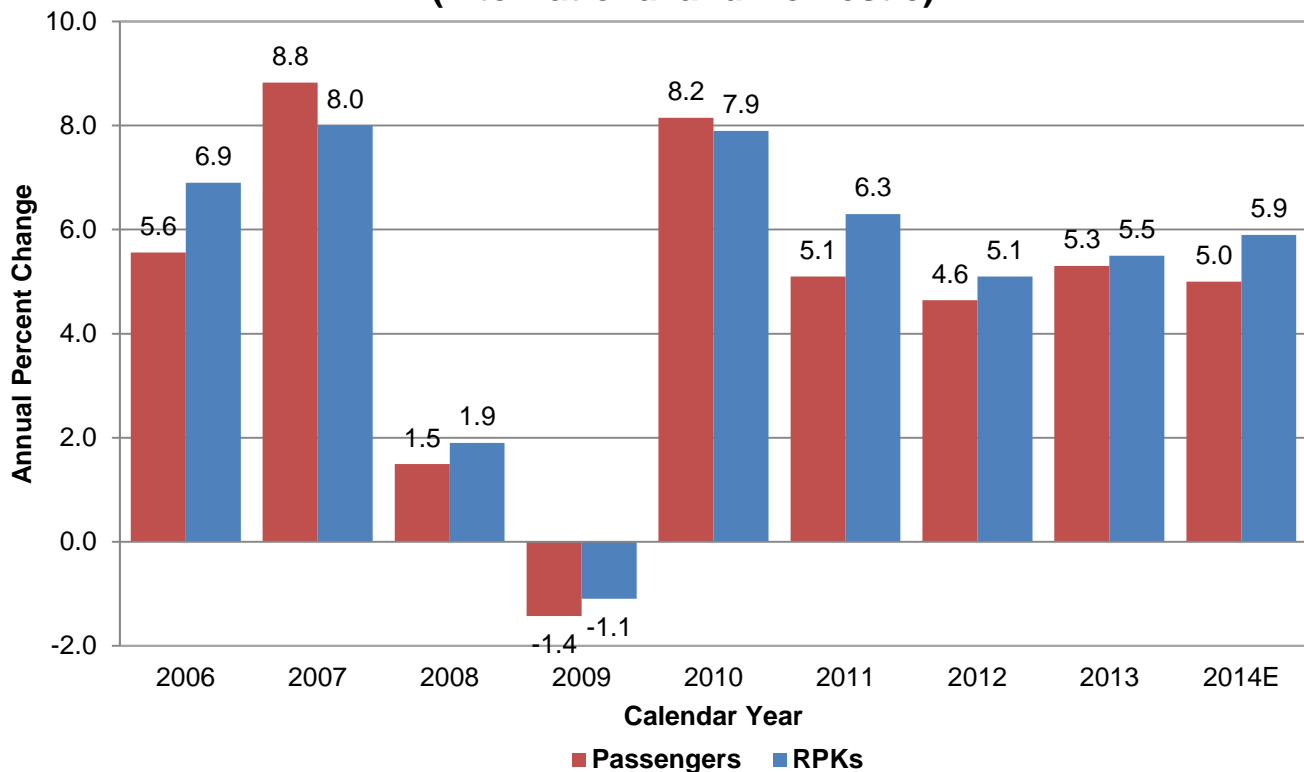
COMMERCIAL AVIATION

Worldwide commercial aviation continued a slow recovery in 2014 as stable jet fuel prices offset relatively disappointing global economic growth. The U.S. industry posted a net profit in 2014, with a similar outcome predicted for foreign carriers. After registering net profits of \$10.6 billion in 2013, global industry net profits for calendar year 2014 are expected to be \$19.9 billion.⁶ All global regions are projected to see an increase in profits as fuel costs fell.

World Travel Demand

Based on data compiled by the International Civil Aviation Organization (ICAO), world air carriers are expected to post another moderate growth performance in CY 2014 as demand for air travel continues to recover from the depressed levels recorded during 2009. Preliminary traffic results for full year 2014 released by ICAO show worldwide revenue passenger kilometers (RPKs) increased 5.9 percent, a 0.4 percentage point increase compared to last year's growth rate.⁷

World Passenger Demand (International and Domestic)



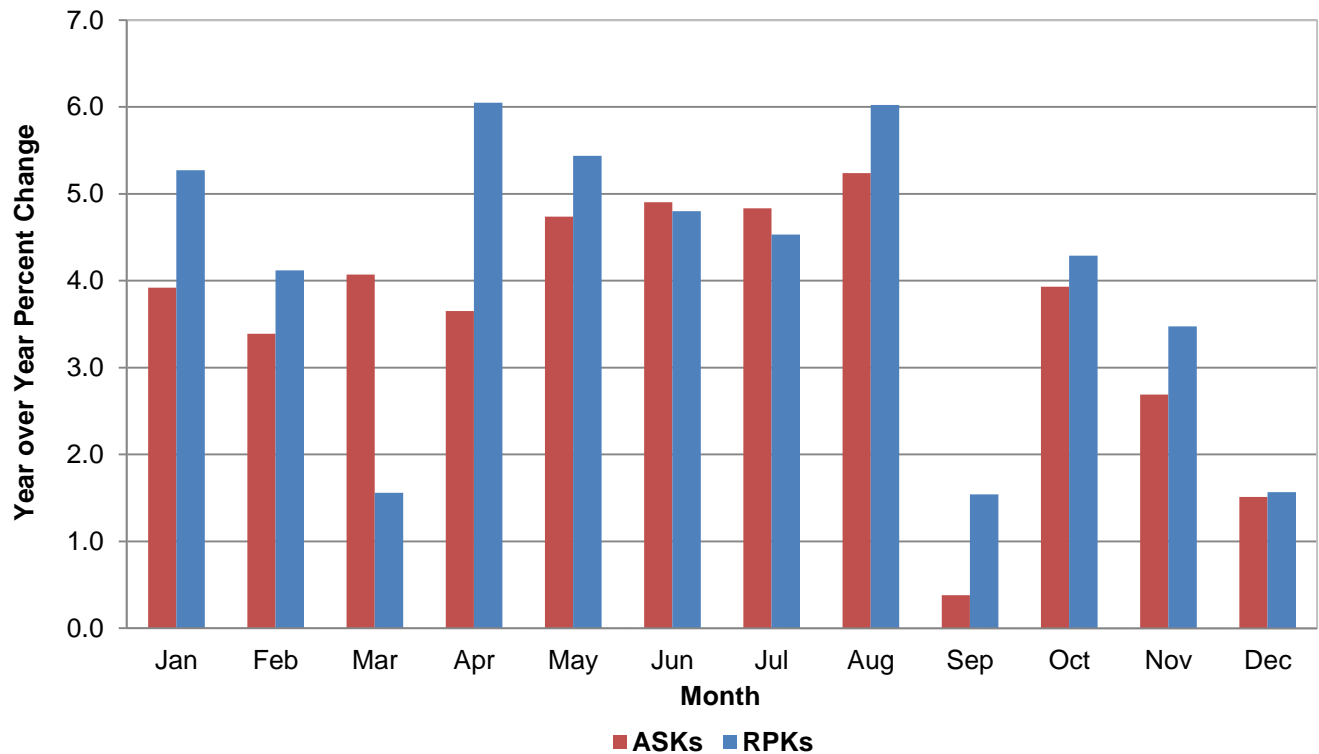
⁶ IATA Economic Performance of the Airline Industry, End Year Report, December 2014.

⁷ ICAO press release dated December 18, 2014.

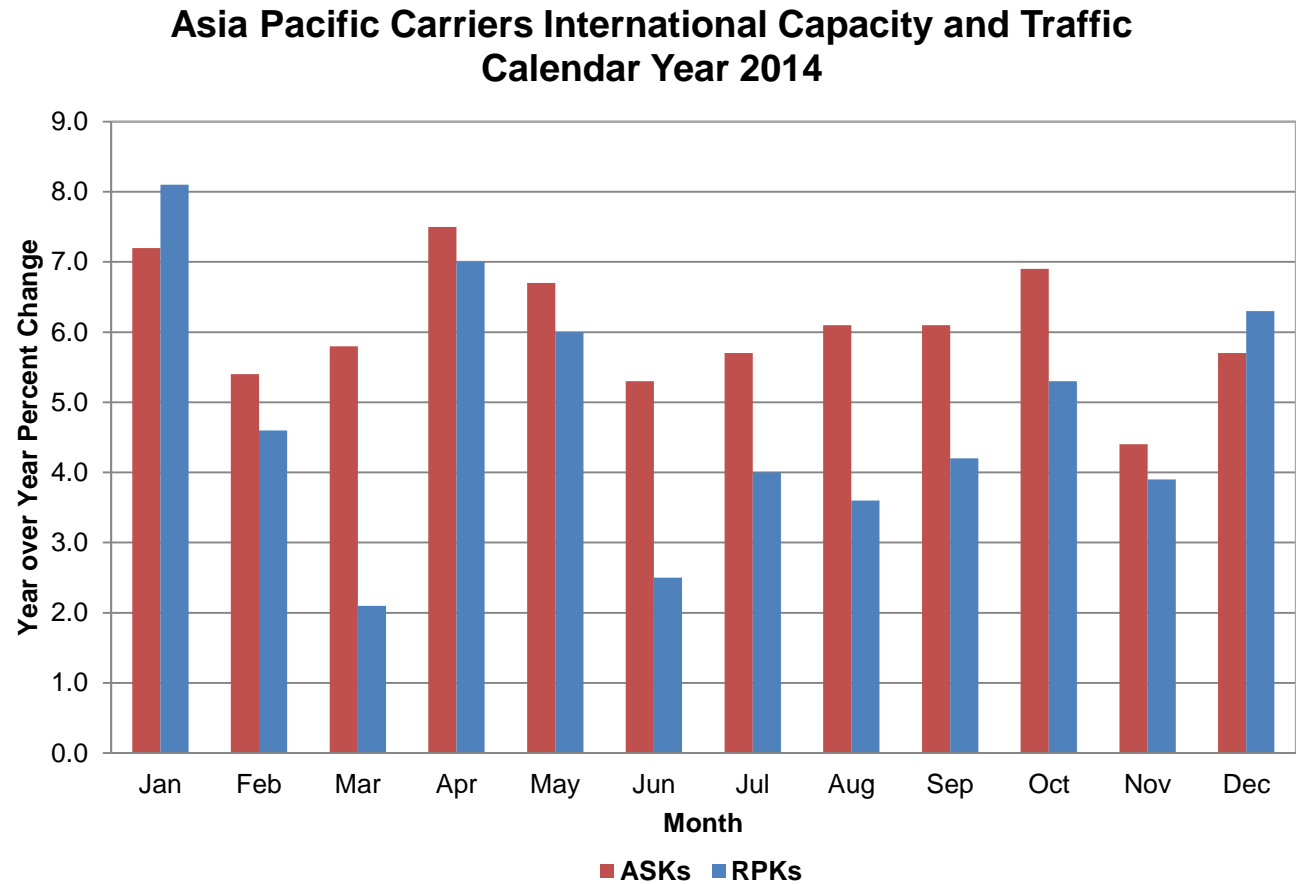
For calendar year 2014, preliminary data from ICAO show passengers were up 5.0 percent over calendar year 2013. Data for the same period shows capacity, as measured by available seat kilometers (ASKs), to be up 5.7 percent.

Traffic and capacity data from the Association of European Airlines (AEA) for calendar year 2014 showed year over year gains in RPKs ranging between 1.5 percent to 6.1 percent and year over year changes in ASKs ranging between 0.4 percent to 5.2 percent.

European Carriers Capacity and Traffic Calendar Year 2014



The Association of Asia Pacific Airlines (AAPA) reported an increase of 4.7 percent in international RPKs and a 6.0 percent increase in international ASKs; international passengers in the region were up 4.8 percent during the same period.⁸

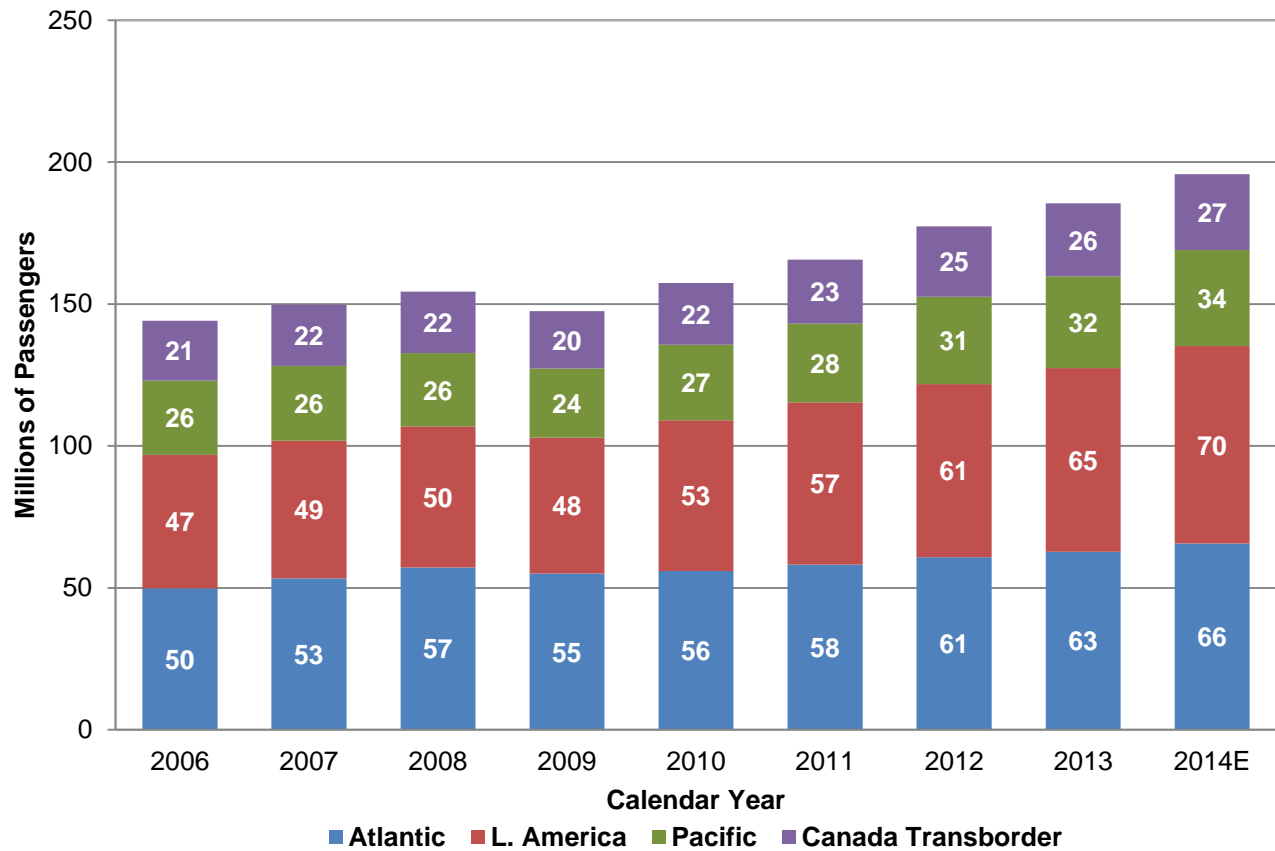


Source: Association of Asia Pacific Airlines

⁸ Association of Asia Pacific Airlines, "Asia Pacific Full Year 2014 Traffic Results", Press Release dated 28 January 2015, Issue 2015: 02.

In CY 2014, U.S. and foreign flag carriers transported an estimated 195.7 million passengers between the United States and the rest of the world, a 5.5 percent increase from 2013. Year-over-year growth occurred in all markets (up 4.6, 7.4, 4.9, and 3.5 percent, respectively, for Atlantic, Latin America, Pacific, and Canada Transborder).

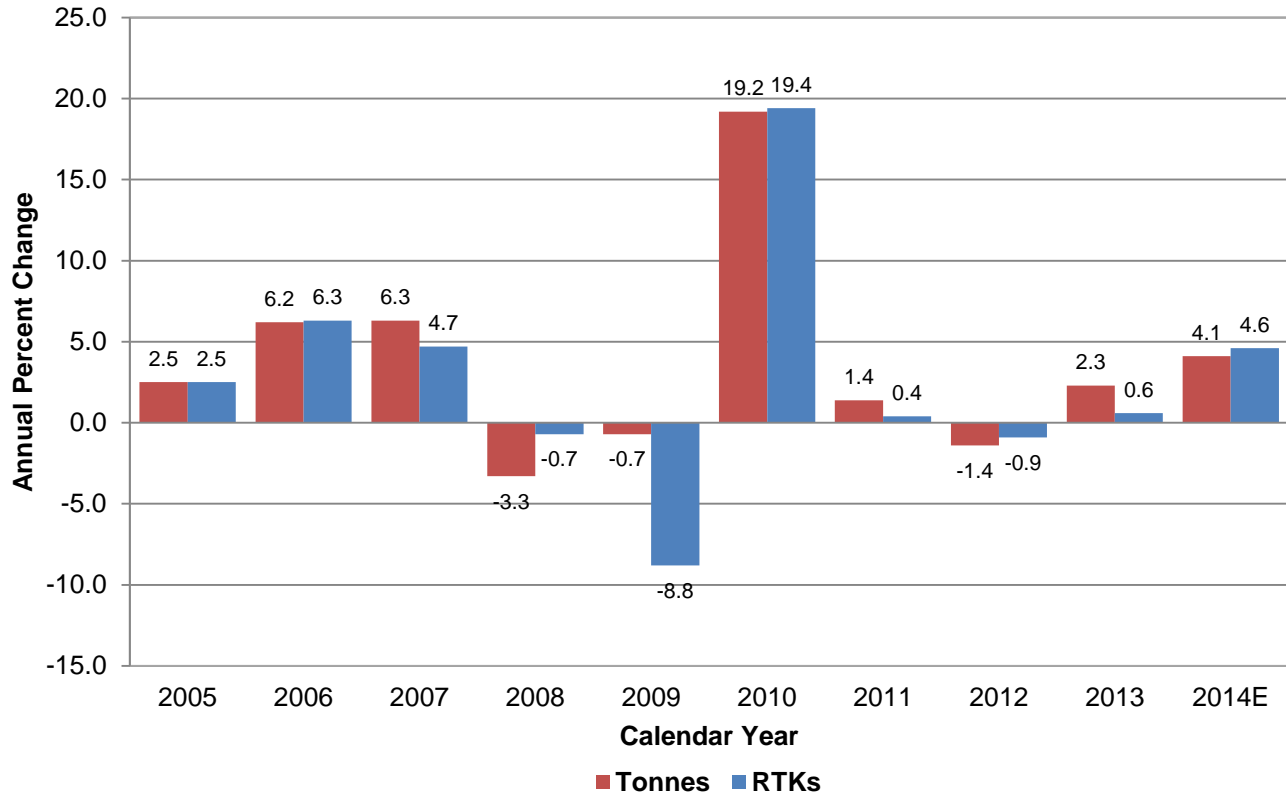
Total Passengers To/From the U.S. American and Foreign Flag Carriers



Source: US Customs & Border Protection data processed and released by Department of Commerce; data also received from Transport Canada

Worldwide air cargo demand increased strongly in 2014. According to ICAO, worldwide freight ton kilometers were estimated to increase 4.6 percent in calendar year 2014 compared to 2013. Freight ton kilometers (FTKs) of AEA member carriers fell 2.0 percent in calendar year 2014 while the international FTKs of AAPA member carriers rose 5.4 percent.

World Air Cargo Demand

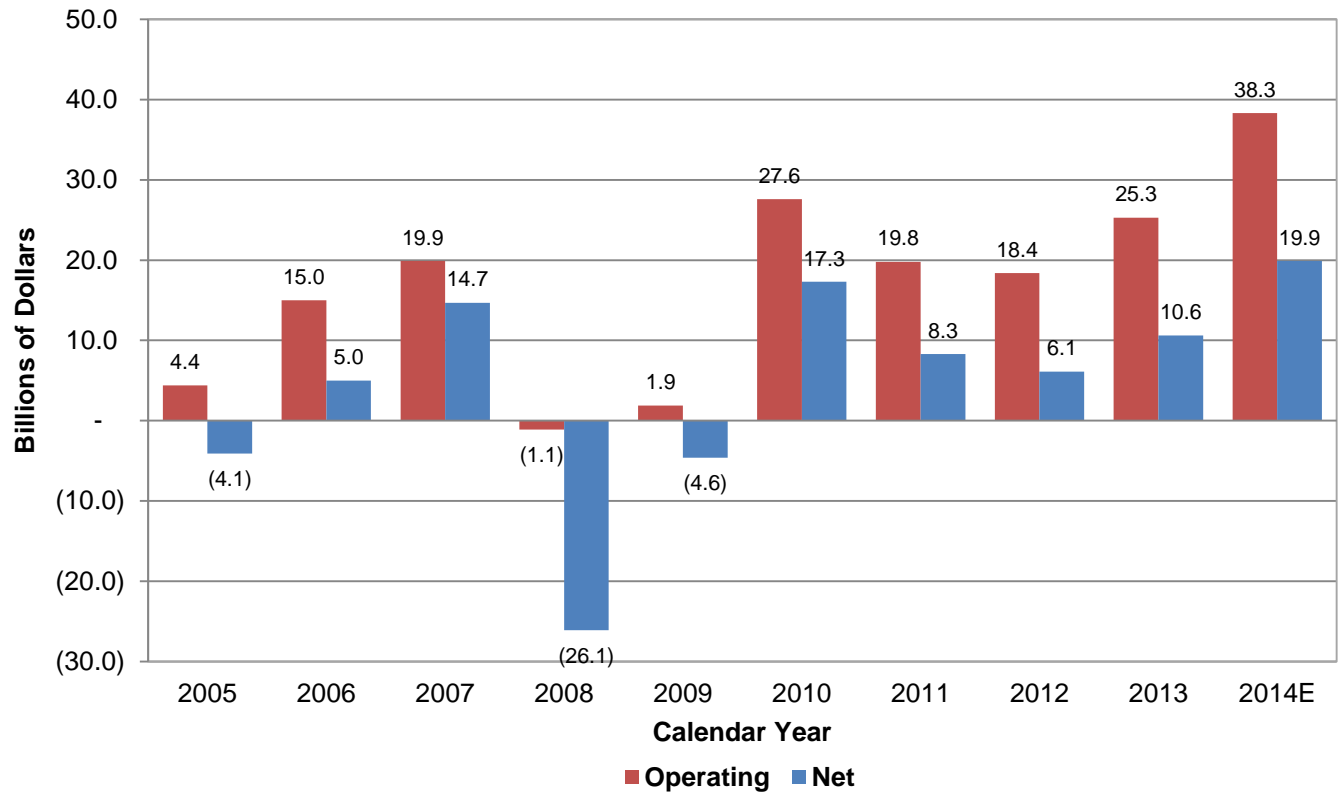


Source: IATA

The International Air Transport Association (IATA) reports that world air carriers (including U.S. airlines) are expected to register an operating profit of \$38.3 billion for 2014. IATA estimates global airline industry net profits to be \$19.9 billion for the same period with all regions to be in the black. Based on financial data compiled by ICAO and IATA, between 2004 and 2014 world airlines produced cumulative operating profits of \$172.8 billion (with ten years out of eleven posting gains) and net profits of \$41.5 billion (with seven years out of eleven posting gains).⁹

⁹ IATA Financial Forecast, December 2014.

World Air Carrier Profit/Loss



U.S. Travel Demand

By year end of FY 2014, the U.S. commercial aviation industry consisted of 16 scheduled mainline air carriers that used large passenger jets (over 90 seats) and 70 regional carriers that used smaller piston, turboprop, and regional jet aircraft (up to 90 seats) to provide connecting passengers to the larger carriers. Mainline and regional carriers offer domestic and international passenger service between the U.S. and foreign destinations, although regional carrier international service is confined to the border markets in Canada, Mexico, and the Caribbean. Twenty-six all-cargo carriers were providing domestic and/or international air cargo service at the end of 2014.

Shaping today's commercial air carrier industry are three distinct trends: (1) continuing industry consolidation and restructuring; (2) continued capacity discipline in response to external shocks, and (3) the proliferation of ancillary revenues.

The restructuring and consolidation of the U.S. airline industry that began in the aftermath of the terror attacks of September 11, 2001 continued in 2014. During the year, Southwest continued to integrate the former AirTran network into its operations while American and US Airways moved ahead with combining their networks and reservations systems. Consequently, when compared to 2007, 5.7 percent fewer domestic ASMs were flown and 2.9 percent less passengers were carried domestically in 2014. This has had clear implications on the size of the aircraft being used and the load factors, topics that will be discussed later in this document.

One of the most striking outcomes of industry restructuring has been the unprecedented period of capacity discipline, especially in domestic markets. Between 1978 and 2000, ASMs in domestic markets increased at an average annual rate of 4 percent a year, recording only two years of decline. Even though domestic ASMs shrank by 6.9 percent in FY 2002, following the events of September 11, 2001, growth resumed and by 2007, domestic ASMs were 3.6 percent above the FY 2000 level. However, since 2007, U.S. domestic market ASMs have decreased by 5.7 percent, as the industry responded first to the sharp rise in oil prices (up 155% between 2004 and 2008) and then the global recession that followed (2009 to the present).

The 5.7 percent reduction in domestic capacity since 2007 has not been shared equally between the mainline carriers and their regional counterparts. To better match demand to capacity, the mainline carriers contracted out "thin" routes to their regional counterparts because they could provide lift at a lower cost, or else they simply removed the capacity altogether. In 2014, the mainline carrier group provided 6.3 percent less capacity than it did in 2007 (and carried 3.6 percent fewer passengers). Capacity flown by the regional group has shrunk by 1.9 percent over the same period (with passengers carried down 0.7 percent).

The most recent trend to take hold is that of ancillary revenues. Carriers generate ancillary revenues by selling products and services beyond that of an airplane ticket to customers. This includes the un-bundling of services previously included in the ticket price such as checked bags and on-board meals, and by adding new services such as boarding priority. As noted earlier, U.S. passenger carriers posted net profits for the fifth consecutive year in 2014 with ancillary revenues a contributing factor to the favorable outcome.

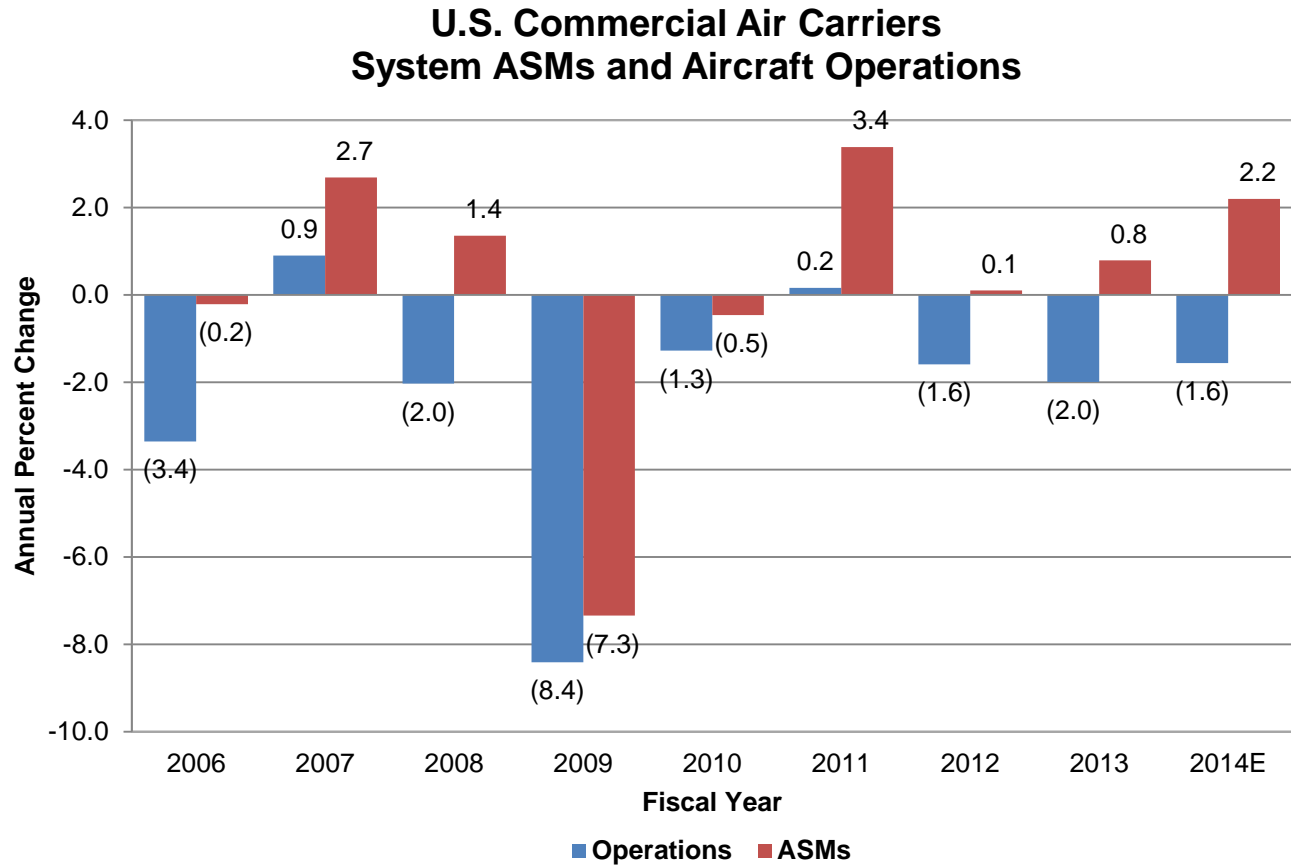
Commercial Air Carriers – Passenger

U.S. commercial air carriers' traffic and capacity in 2014 showed mild growth for the second year in a row which is an improvement over 2013. System, that is, the sum of domestic plus international capacity, increased 2.2 percent to 1.025 trillion ASMs while RPMs increased 2.5 percent to 855.1 billion. During the same period system-wide enplanements increased 2.3 percent to 756.3 million; U.S. mainline carrier enplanement growth was 3.0 percent while regional carriers carried 0.2 percent fewer passengers. In the domestic market, mainline enplanements saw an increase for the fourth consecutive year, up 2.9 percent, marking the first time since 2000 that the industry recorded four consecutive years of passenger growth in the domestic market. Mainline passengers in international markets posted a fourth year of growth, up 3.6 percent.

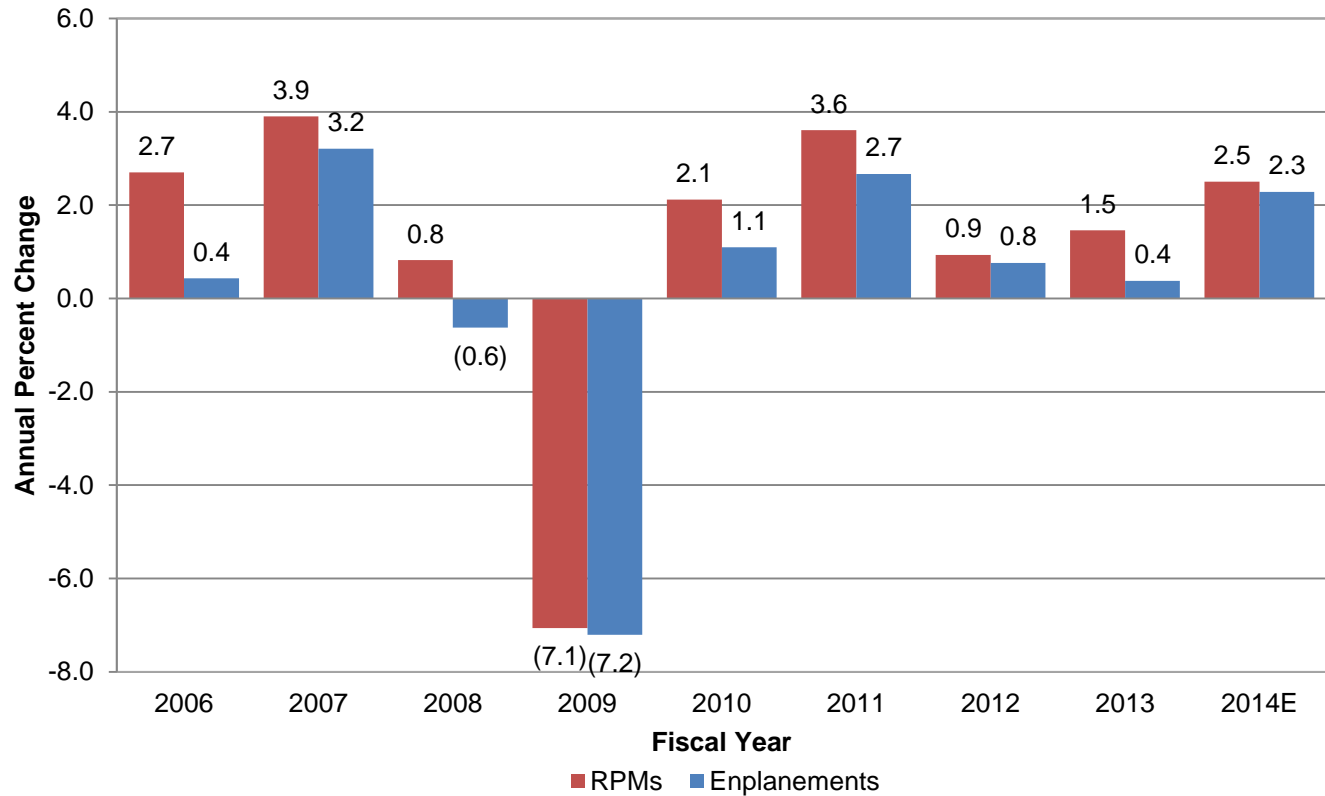
Even though the recession was officially over in June 2009¹⁰, carriers continued to face economic uncertainty in 2014 as corporate travel budgets remained strained, unemployment was still high relative to the early 2000s, the housing market remained volatile, and government spending remained stagnant. In such an uncertain, but slowly improving, environment, industry capacity growth was restrained (up 2.2 percent), after only a 0.8 percent increase in 2013. Given the minimal increase in seats available to the travelling public, carriers were still able to raise airfares despite the slow growth in demand. Higher airfares and ancillary revenues, coupled with flat to rapidly falling fuel prices resulted in U.S. carriers finishing up 2014 with a net profit.

System load factor and trip length continued to edge slightly upwards in 2014, even as seats per aircraft mile increased. The average load factor reached a record-breaking 83.4 points, up 0.3 points from 2013 while passenger trip length increased 2.4 miles, to 1,131 miles. Seats per aircraft mile increased to 145.2 seats (up 2.3 seats per aircraft mile), the highest level since 1999.

¹⁰ According to the National Bureau of Economic Research.



U.S. Commercial Air Carriers System RPMs and Enplanements

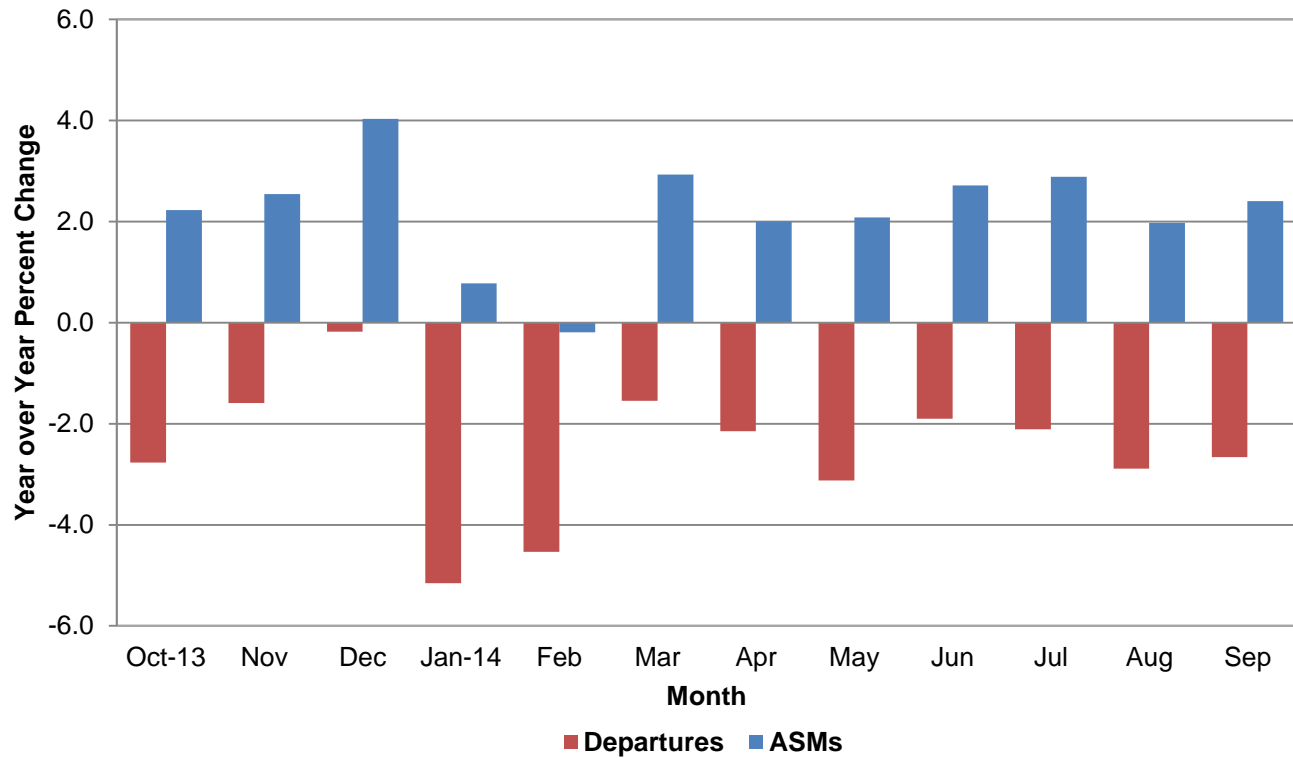


Domestic Passenger Markets

Domestic¹¹ ASMs increased 1.4 percent in 2014 after increasing just 0.8 percent in 2013. Departures were down 1.9 percent for the year after falling 2.1 percent in FY 2013. Mainline carrier ASMs were up 1.8 percent for the year, while regional carrier ASMs fell 1.5 percent. At the end of FY 2014, domestic ASMs were still 5.7 percent below pre-recession levels (2007) with departures down 17.3 percent.

¹¹ The 50 states, Puerto Rico, and the U.S. Virgin Islands.

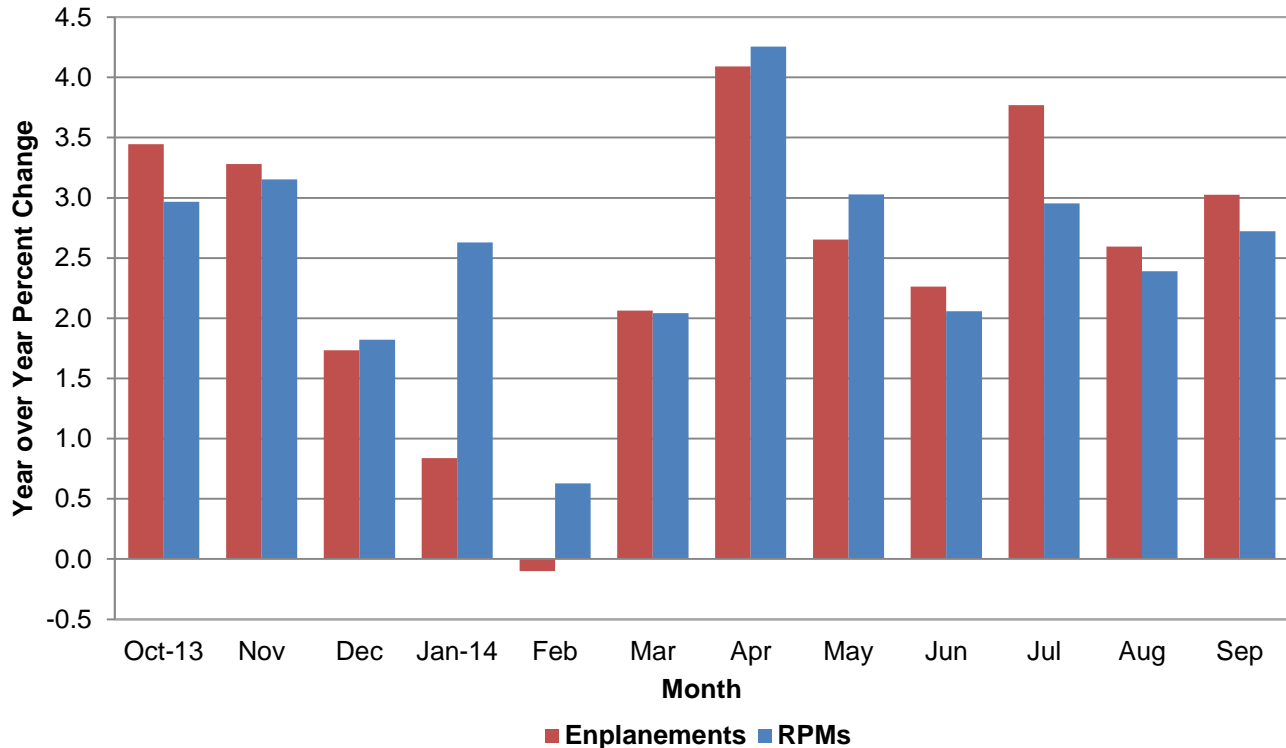
U.S. Commercial Carriers Domestic Capacity* Fiscal Year 2014



*Scheduled and Non-Scheduled

In a turnaround from 2013, domestic passenger enplanements grew at a faster rate than ASMs in 2014, up 2.1 percent for the year. Mainline carrier enplanements were up 2.9 percent for the year while regional carrier enplanements fell 0.2 percent, continuing the downward trend that began in 2011.

U.S. Commercial Carriers Domestic Traffic* Fiscal Year 2014



*Scheduled and Non-Scheduled

Domestic RPMs also grew faster than ASMs in FY 2014 with domestic RPMs up 2.5 percent and mainline carrier RPM growth was 2.8 percent, while regional carrier RPMs increased 0.5 percent.

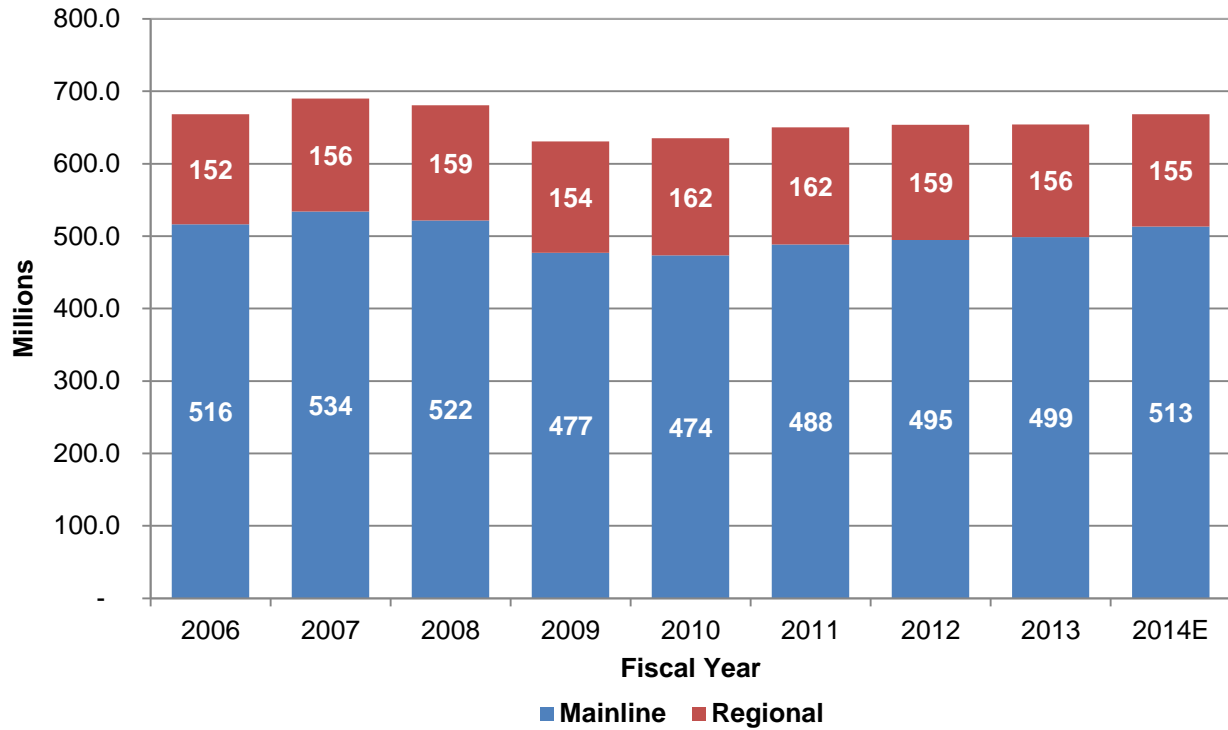
Domestic carrier load factor increased 1.1 points to 84.4 percent, with both the mainline and regional carriers groups posting record high loads. Mainline carrier load factor increased 0.8 points from FY 2013 to 85.0 percent, while regional carrier load factor increased 1.6 points to 80.0 percent.

Since FY 2007, total domestic capacity has decreased by 5.7 percent. Mainline carriers have reduced their domestic capacity by 6.3 percent with cutbacks by network carriers more than offsetting the growth of low-cost carriers, while regional carrier capacity has declined by a smaller amount (down 1.9 percent since 2007).

During the same period, mainline carrier RPMs have decreased 0.9 percent, while enplanements have fallen 3.6 percent. In comparison, over this same period, regional carrier RPMs increased 4.0 percent while enplanements have fallen 0.7 percent. As a result, mainline carrier domestic capacity share has fallen from 87.6 percent in 2007 to 87.1 percent in 2014, with the share of domestic RPMs flown by mainline carriers dropping from 88.3 percent to 87.7

percent during the same period. In 2014 the regional carriers' domestic enplanement share was 23.2 percent, up from 22.6 percent in 2007.

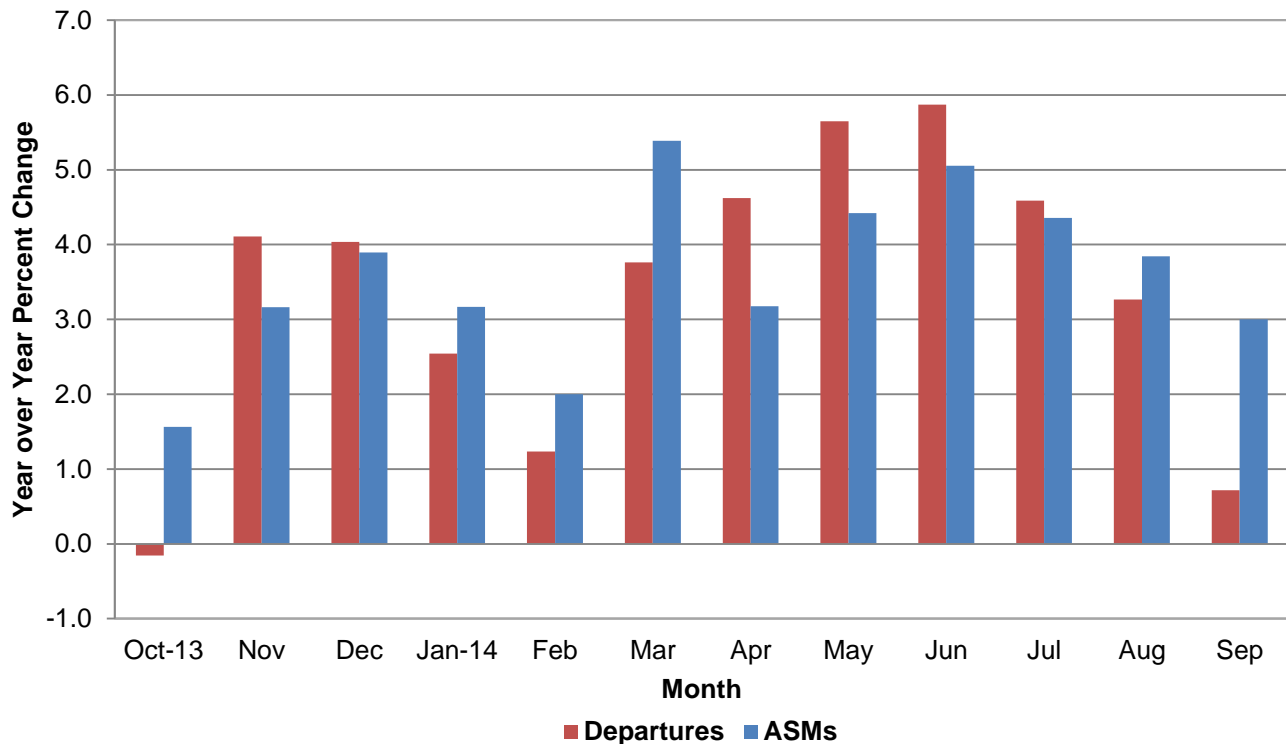
U.S. Commercial Air Carriers Domestic Enplanements by Carrier Group



International Passenger Markets

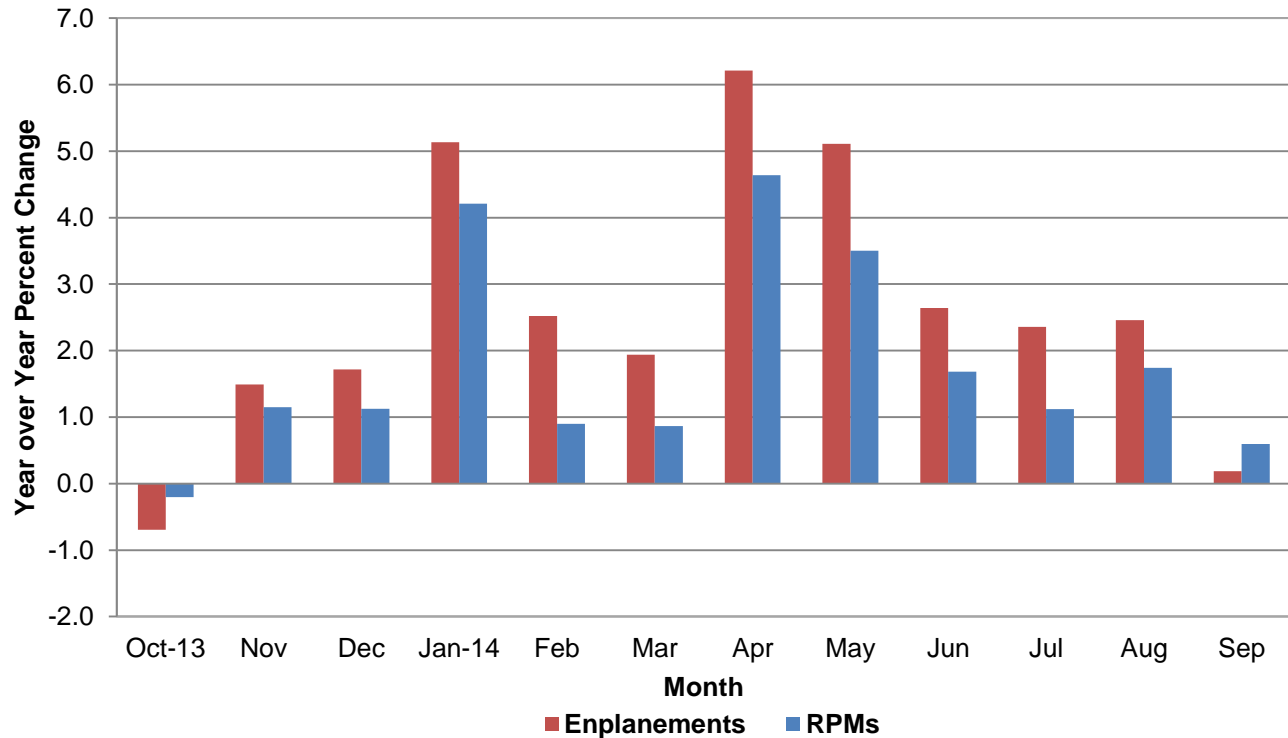
U.S. carrier international ASMs were up 4.0 percent and departures were up 3.6 percent in 2014. ASMs increased in the Latin, Pacific and Atlantic markets, up 8.4, 1.2 and 2.8 percent, respectively.

U.S. Commercial Carriers International Capacity* Fiscal Year 2014



U.S. carrier international RPMs were up 2.6 percent and passenger enplanements were up 3.4 percent in 2014. The Pacific market posted negative results, with RPMs falling 0.1 percent while enplanements decreased 2.9 percent. RPMs and enplanements increased 7.7 and 7.5 percent, respectively, in the Latin American market, while RPMs and enplanements increased 0.8 and 0.6 percent, respectively, in the Atlantic market.

U.S. Commercial Carriers International Traffic* Fiscal Year 2014



*Scheduled and Non-Scheduled Ops. Source: DOT-F41

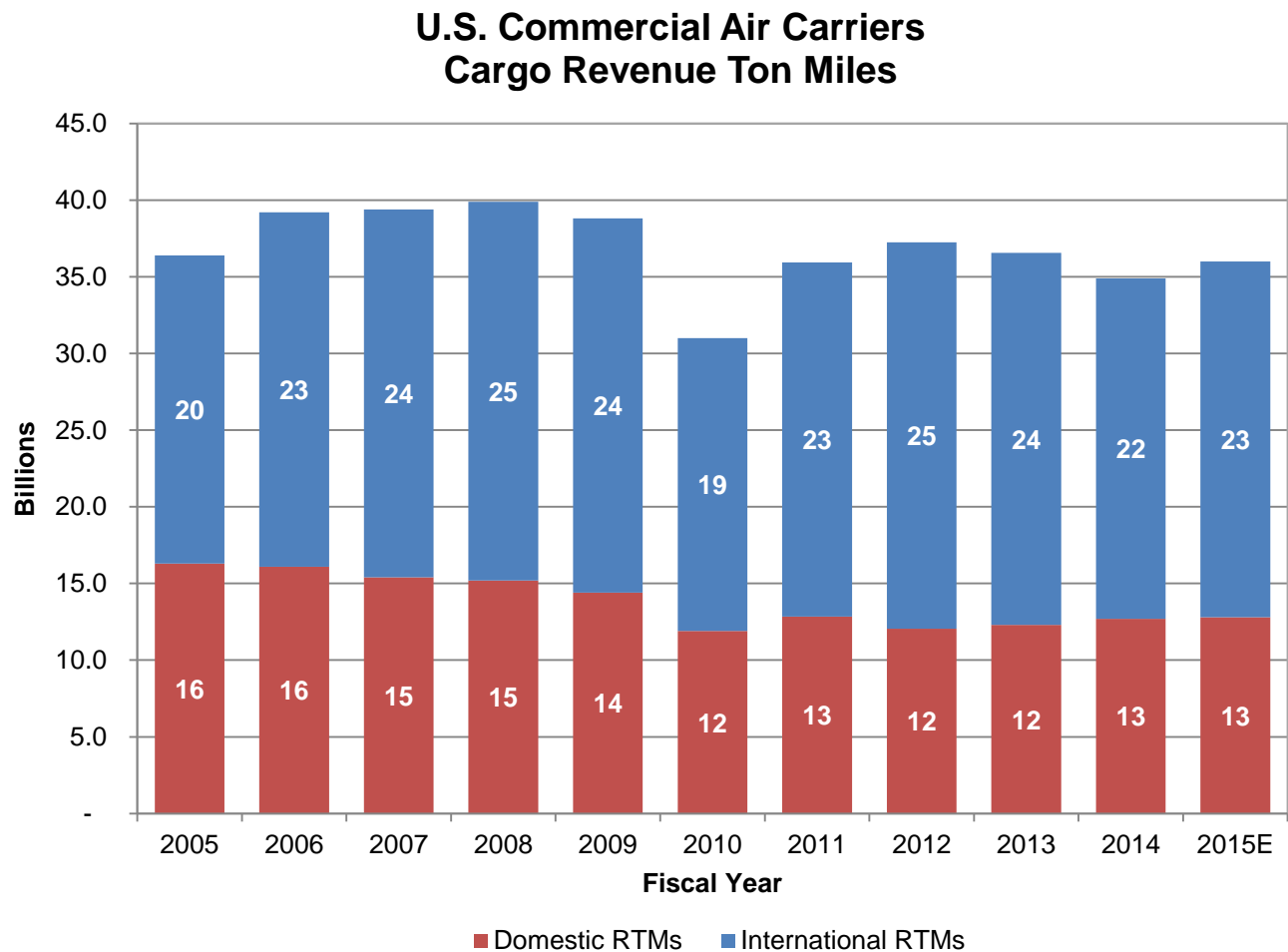
The international load factor decreased 1.2 percentage points overall in 2014 to 81.4 percent. Load factor decreased in all markets: in the Latin market the load factor went down 0.5 points to 80.6 percent; in the Pacific market load factor was down 1.1 points to 82.0 percent and in the North Atlantic market the load factor decreased by 1.7 points to 81.7 percent.

In 2014, 54 percent of the passengers flying abroad on U.S. flag carriers traveled to the Latin America market. The remaining 46 percent of international passengers was split between the Atlantic market (29 percent) and the Pacific market (17 percent); these percentages are unchanged from 2013.

Commercial Air Carriers – Cargo

Air cargo traffic contains both domestic and international freight/express and mail. The demand for air cargo is a derived demand resulting from economic activity. Cargo moves in the bellies of passenger aircraft and in dedicated all-cargo aircraft on both scheduled and nonscheduled service. Cargo carriers face price competition from alternative shipping modes such as trucks, container ships, and rail cars.

U.S. air carriers flew 34.8 billion revenue ton miles (RTMs) in 2014, unchanged from 2013. Domestic cargo revenue ton miles (RTMs) increased 2.3 percent to 12.7 billion. However, international RTMs decreased by 1.2 percent to 22.2 billion.



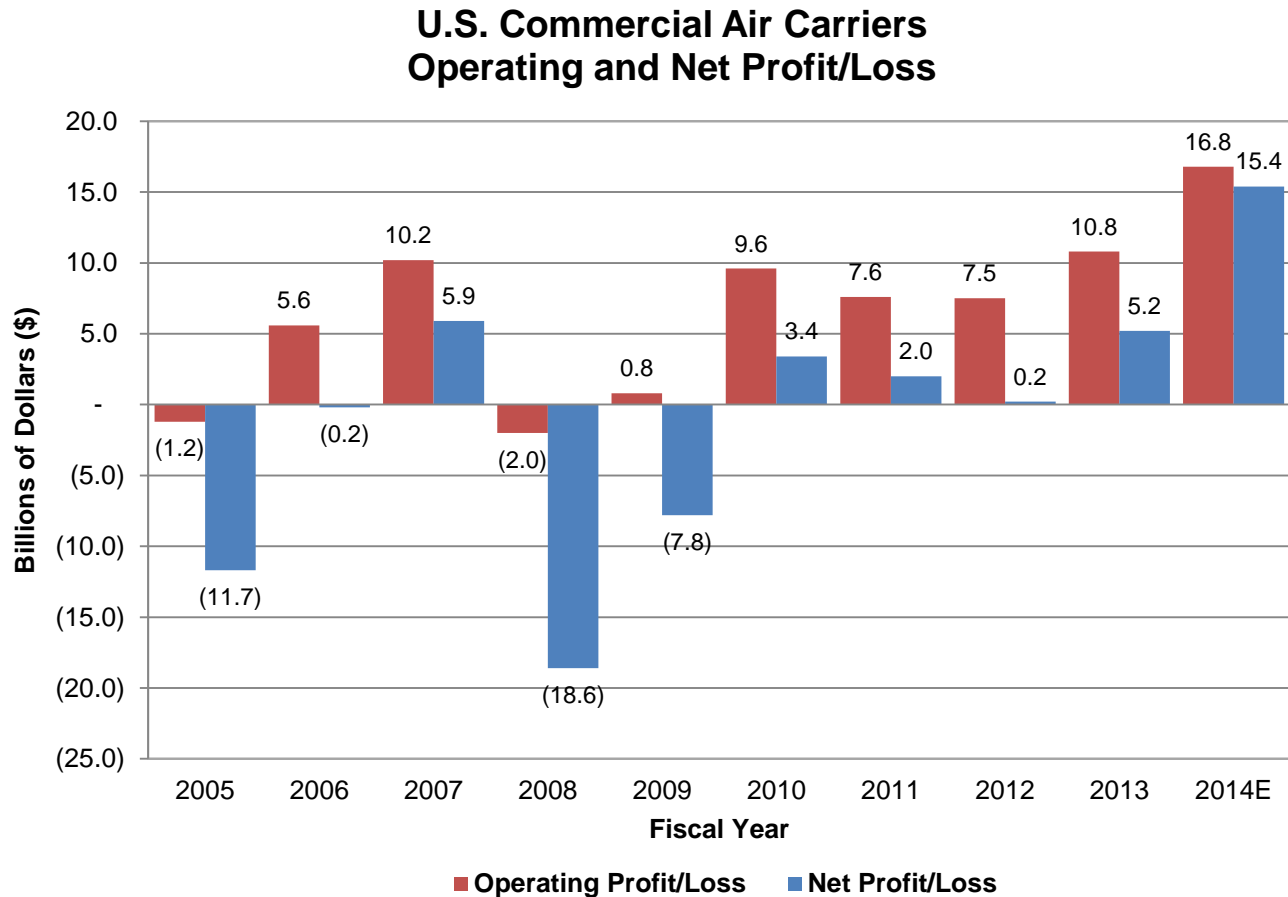
Air cargo RTMs flown by all-cargo carriers comprised 78.2 percent of total RTMs in 2014, with passenger carriers flying the remainder. Total RTMs flown by the all-cargo carriers decreased 1.8 percent in 2014 from 27.7 billion to 27.2 billion. Total RTMs flown by passenger carriers were 7.6 billion in 2014, 7.0 percent higher than in 2013.

International Air Cargo Revenue Ton Miles by Region

U.S. carrier international air cargo traffic can be divided into four components consisting of Atlantic, Latin, Pacific, and 'Other International.' In 2014 total international RTMs decreased 1.2 percent from 22.4 billion to 22.2 billion with declines in the Latin and Other International regions more than offsetting increases in the Atlantic and Pacific regions. The largest decrease was posted in the 'Other International' category where cargo RTMs fell by 12.1 percent from 5.8 billion RTMs to 5.1 billion RTMs. The Latin market saw cargo RTMs fall by 2.7 percent from 1.8 billion RTMs to 1.7 billion RTMs. The Atlantic market posted a modest increase, up 3.4 percent from 6.7 billion to 6.9 billion while the Pacific region saw cargo RTMs rise from 8.2 billion RTMs to 8.4 billion RTMs an increase of 3.0 percent.

U.S. Commercial Air Carriers 2014 Financial Results

U.S. commercial air carriers posted a net profit of \$ 15.4 billion during FY 2014 after reporting a net profit of \$5.2 billion one year earlier.



Source: DOT Forms 41 & 298C

Operating revenues (passenger and cargo) for FY 2014 were up 4.2 percent from FY 2013. Passenger carriers saw their revenue increase 5.4 percent buoyed by rising yields and modest increases in traffic. The increase in revenue underscored the ability of passenger carriers to push through fare increases and to offer value-added services that leisure and business passengers were willing to buy. Revenues for cargo carriers fell for the second year in a row, down 0.7 percent, with the continued slowdown in cargo traffic after falling 1.5 percent in FY 2013.

During the same period, operating expenses for all carriers rose 1.2 percent following a 0.8 percent decrease in FY 2013. The small rise in operating expenses during FY 2014 was driven in large part by a 2.6 percent fall in the price of fuel for the year.

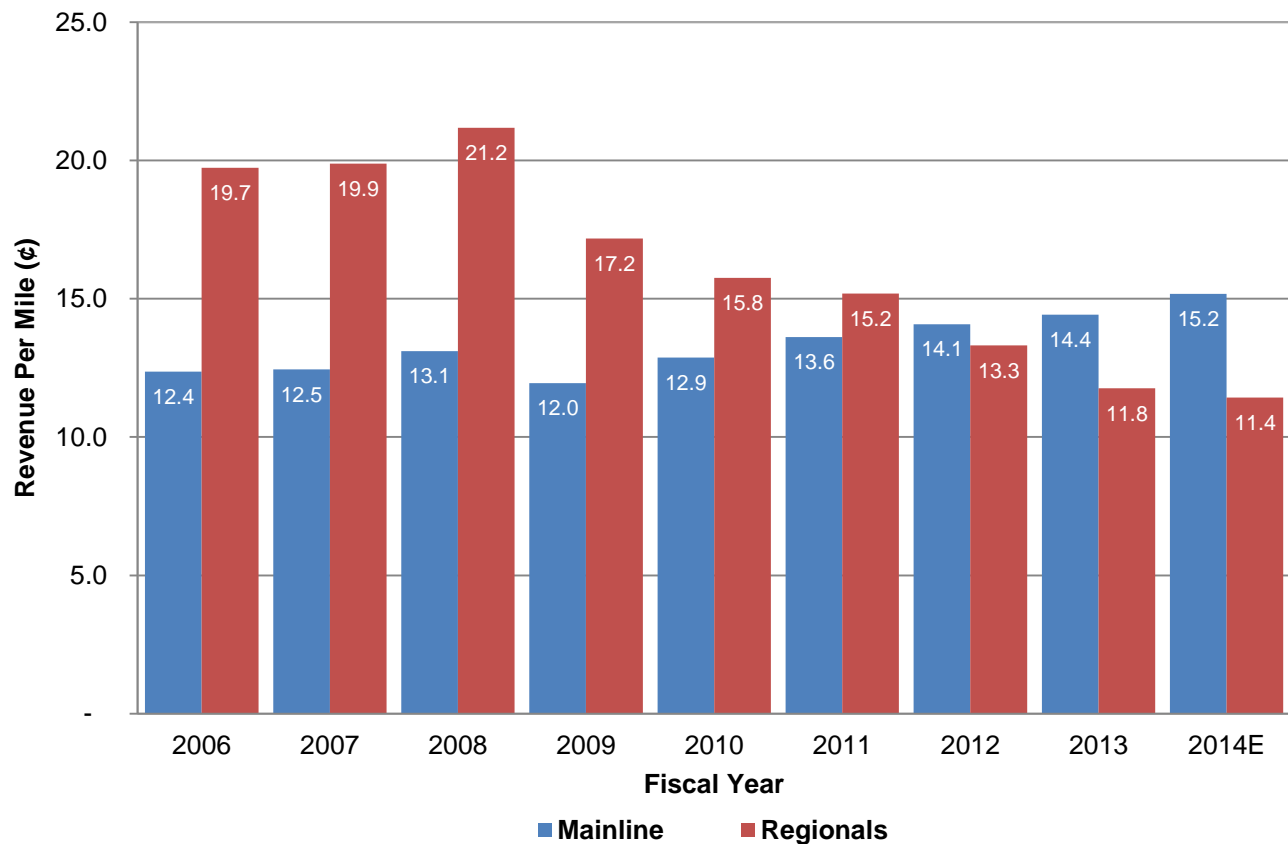
In FY 2014, passenger carriers reported operating income of \$14.9 billion and net income of \$14.4 billion, while air cargo carriers reported an operating profit of \$1.9 billion and a net income

of \$1.0 billion. In the domestic market, passenger carriers generated an operating profit of \$10.5 billion and net income of \$10.2 billion. In the international market, this carrier group posted operating and net profits of \$4.4 billion and \$4.2 billion, respectively. Cargo carriers posted an operating profit of \$4.7 billion and a net income of \$3.0 billion in domestic markets. In international markets, the cargo carriers reported an operating loss of \$2.8 billion and net loss of \$2.0 billion.

The industry's financial results in FY 2014 reflected the strong results posted by the passenger carriers, especially the network carriers. After posting a net profit in FY 2013 of \$3.6 billion, this carrier group posted operating profits of \$11.1 billion and net income of \$12.1 billion. For the eight reporting low-cost carriers, operating profits totaled \$3.2 billion and net income totaled \$2.1 billion for the full year.

Solid demand growth buoyed by the improving economy coupled with continued capacity discipline by the mainline carriers led to healthy increase in mainline carrier passenger yield for the year. Domestic mainline carrier passenger yield increased to 15.12¢ in 2014, up 4.8 percent from the 2013 level of 14.44¢.

U.S. Commercial Air Carriers Domestic Passenger Yield



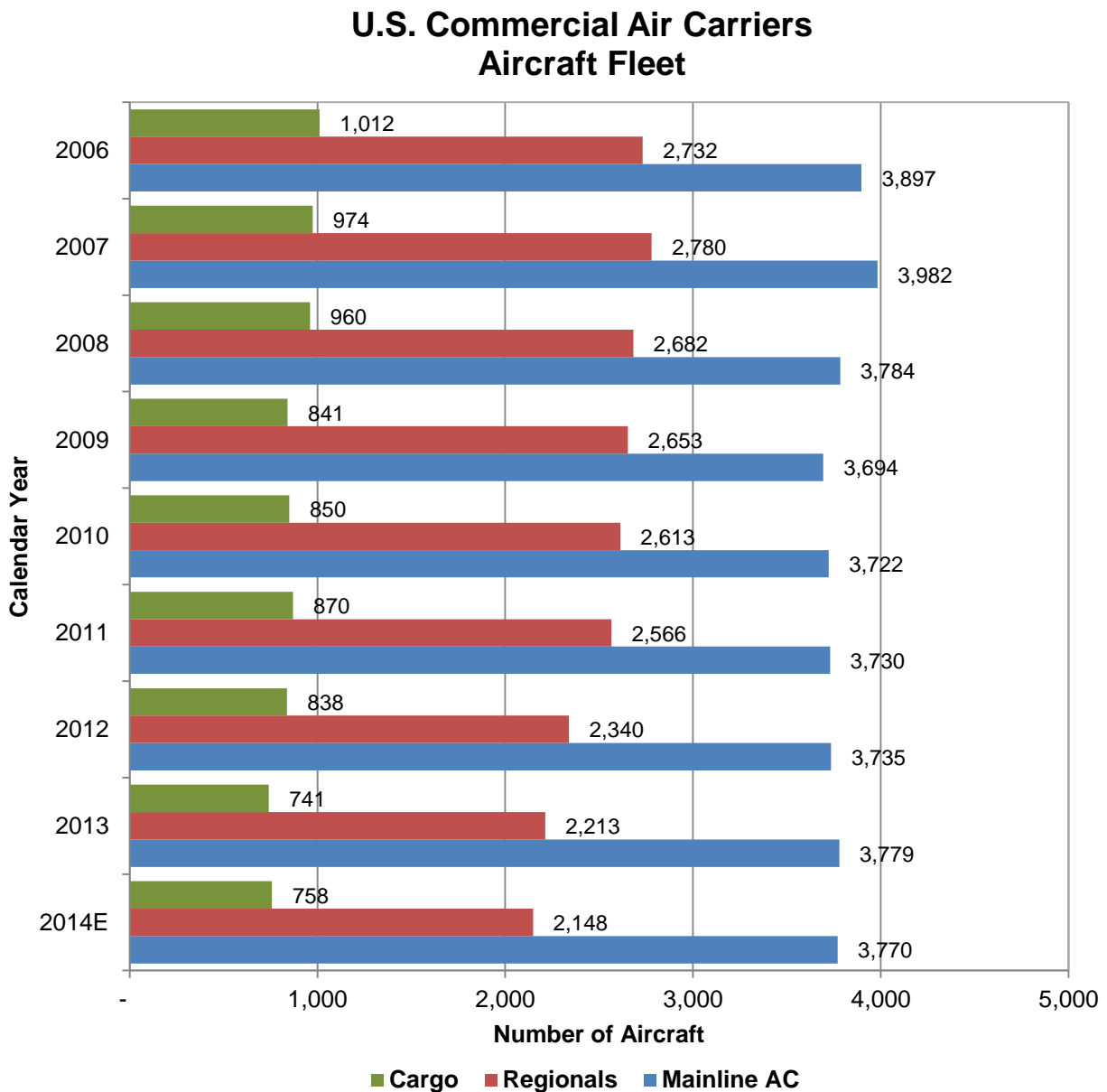
Of the reporting regional carriers, operating profits totaled \$376 million and net income totaled \$99 million for FY 2014, despite domestic yield falling 2.8 percent. As the industry continues to

restructure, network carriers have negotiated contracts with their regional partners that shift more of the financial risk of contract flying to the regional carriers. Since 2007, regional carrier yield is down 50 percent in real terms (compared to an increase of 5.7 percent in mainline carrier yield for the same period). In addition, longer trip lengths (due to a growing number of larger and faster regional jet aircraft entering the fleet) and higher load factors have also contributed to the drop in regional yield. All other things being equal, an increase in either the trip length or the load factor results in a drop in yield since fee-for-departure revenues are spread over a broader base of RPMs.

U.S. Commercial Air Carriers 2014 Aircraft Fleets

The commercial passenger carrier fleet is undergoing transformation. The mainline carriers are retiring older, less fuel efficient aircraft (e.g. 737-300/400/500, 757/767, and MD-80) and replacing them with more technologically advanced A320 and 737-700/800/900 aircraft. The regional carriers are growing their fleet of 70 to 90 seat regional jet aircraft and reducing their fleet of 50-seat jet aircraft.

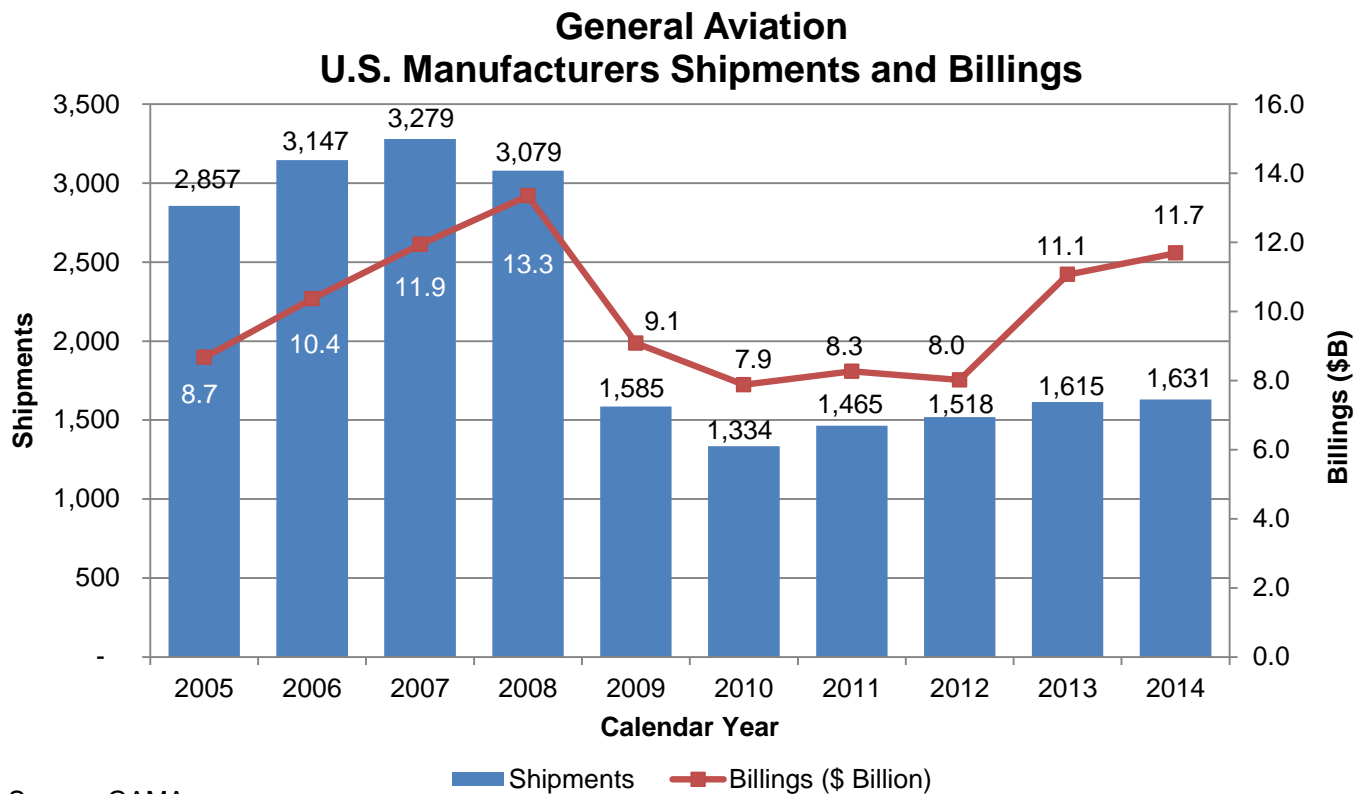
The total number of aircraft in the U.S. commercial fleet (including regional carriers) is estimated at 6,676 for 2014, a decrease of 57 aircraft from 2013. This includes 3,770 mainline air carrier passenger aircraft (over 90 seats), 758 mainline air carrier cargo aircraft, and 2,148 regional carrier aircraft (jets, turboprops, and pistons).



The mainline carriers' passenger jet fleet decreased by 9 aircraft in 2014, following a 44 unit increase in 2013, as both network carriers and low cost carriers added to their fleets. With the decrease in the fleet in 2014, the mainline carrier fleet now stands at 16.0 percent below (723 aircraft) the level it was in 2000. Like the mainline carrier fleet, the regional carrier fleet shrank in 2014, falling by 65 units. Since reaching a peak in 2007, the U.S. regional carrier fleet has been reduced by more than 22 percent (632 units). Consolidation among regional carriers and high fuel prices continue to spur retirements of 50 seat and smaller regional jets as well as small piston and turboprop aircraft.

GENERAL AVIATION

The general aviation industry continued its modest growth in 2014, especially with the help from growth in business jet and single engine piston deliveries. The strong growth of turboprop and multi-engine piston segments in 2013 slowed down to closer to their 2012 levels. Based on figures released by the General Aviation Manufacturers Association (GAMA), U.S. manufacturers of general aviation aircraft delivered 1,631 aircraft in CY 2014, 1.0 percent more than CY 2013. This was the fourth year of increase in shipments. Overall piston deliveries increased by 4.5 percent, with single-engine deliveries up 6.2 percent but the much smaller multi-engine category down 10.0 percent. In the turbine categories, turbojet deliveries were up by 12.3 percent. Turboprop deliveries went down by 11.2 percent in 2014. U.S. billings in CY 2014 were totaled \$11.7 billion, up 5.6 percent from 2013.



Source: GAMA

General Aviation operations at combined FAA and contract towers decreased 1.1 percent in 2014, led by a 1.4 percent decline in itinerant operations. Local operations fell 0.6 percent. General aviation activity at consolidated traffic facilities (FAA TRACONS) fell 0.2 percent, while the number of general aviation aircraft handled at FAA en-route centers increased by 4.7 percent.

The FAA uses estimates of fleet size, hours flown, and utilization from the General Aviation and Part 135 Activity Survey (GA Survey), which has been conducted annually since 1977, as baseline figures upon which forecast growth rates are applied. Beginning with the 2004 GA Survey, there were significant improvements to the survey methodology. These improvements

included conducting 100 percent samples for turboprops and turbojets, all rotorcraft, all aircraft in Alaska and all aircraft operating on-demand under Part 135. In addition, the sample design was revised to stratify by aircraft type (15 categories), FAA region (9 categories), whether the aircraft was manufactured in the past 5 years (2 categories), and whether the aircraft operates under a Part 135 certificate (2 categories). Furthermore, a large fleet reporting form was incorporated to allow owners/operators of multiple aircraft to report aggregate data for their entire fleet on a single form. In 2005 an additional aircraft category (light sport aircraft) was added. As a result of these changes the sample size nearly doubled. Between 2003 and 2005 large changes in both the number of aircraft (turbojets up by 22.8 percent, total rotorcraft up by 33.7 percent) and hours (single-engine piston down by 17.6 percent) in many categories occurred. The results of 2011 survey were not available to use. Therefore, estimates of 2011 fleet and hours were based on estimated number of general aviation aircraft in the FAA civil aircraft registration database by the end of CY 2011, and past rates of active aircraft and utilization by type of aircraft and age of the fleet. The results of the 2013 Survey, the latest one available, were consistent with the results of past surveys since 2004. This reinforces our belief that methodological improvements have brought about superior estimates relative to those in the past and they are used as the basis for our forecast.

In 2010 FAA issued a Rule for Re-Registration and Renewal of Aircraft Registration. According to this rule, all aircraft registered in the U.S. had to re-register over the three-year period from 2011 to 2013, and afterwards registrations must be renewed every three years. The effect of this Rule was initially recorded in the results of the 2012 GA Survey that saw the number of active GA aircraft fall by 6.4 percent, from 223,370 in 2010 to 209,034 in 2012. The 2013 GA Survey showed a further decline of 4.4 percent to 199,927 total active aircraft. The biggest decline was in the piston aircraft category, in which the number of active aircraft decreased 11.4 percent from 155,419 in 2010 to 137,655 in 2013. In individual segments, other aircraft category (including balloons and gliders) recorded the largest decline by 24.8 percent, from 5,684 to 4,277 aircraft, followed by the experimental aircraft by 16.0 percent, from 29,662 to 24,918. Piston rotorcraft segment also showed a significant fall by 12.6 percent, from 3,588 aircraft in 2010 to 3,137 in 2013.

General aviation flight hours decreased by 7.8 percent from 24.8 million in 2010 to 22.9 million in 2013. The largest percentage decline was observed in the piston rotorcraft segment with 20 percent from 794,000 hours to 636,000 hours. Utilization rate in this category fell by 8 percent, from 221 hours per year to 203 hours. Turbine rotorcraft hours declined by 11 percent, from 2.6 million to 2.3 million, while utilization in this segment fell by 13 percent from 401 hours per year to 349 hours. Single engine piston aircraft hours declined by 12 percent from 12.2 million in 2010 to 10.7 million in 2013, the largest component of the overall drop in GA flight hours. The decline in the size of the single engine piston fleet was the primary reason for the fall in hours during this period as utilization in this segment fell only by 1 percent from 87 to 86 hours. There were increases in turboprop (up 11%, from 2.3 million to 2.6 million), turbojet (up 3%, from 3.4 million to 3.5 million), and special light-sport aircraft hours (up 25%, from 138,000 to 173,000), but not large enough to offset the decline in other areas. The turboprop utilization rate increased by 8 percent from 248 to 269 hours, and the turbojet utilization rate increased by 2 percent, from 294 to 300 hours.

Student pilots are important to general aviation and the aviation industry as a whole. Student pilot numbers had been in decline for many years, but in 2010 the FAA issued a rule that

increased the duration of validity for student pilot certificates for pilots under the age of 40 from 36 months to 60 months. As a result, according to statistics compiled by the FAA's Mike Monroney Aeronautical Center, the number of student pilots at the end of 2010 increased by 64.8 percent, or approximately by 47,000 pilots, compared to calendar year end 2009. While the impact of the new rule on the long term trend in student pilots has yet to be fully determined, the number of student pilots slightly increased by 0.2 percent from its 2013 level to 120,546. The average age of a U.S. pilot in 2014 was 44.8 years old.

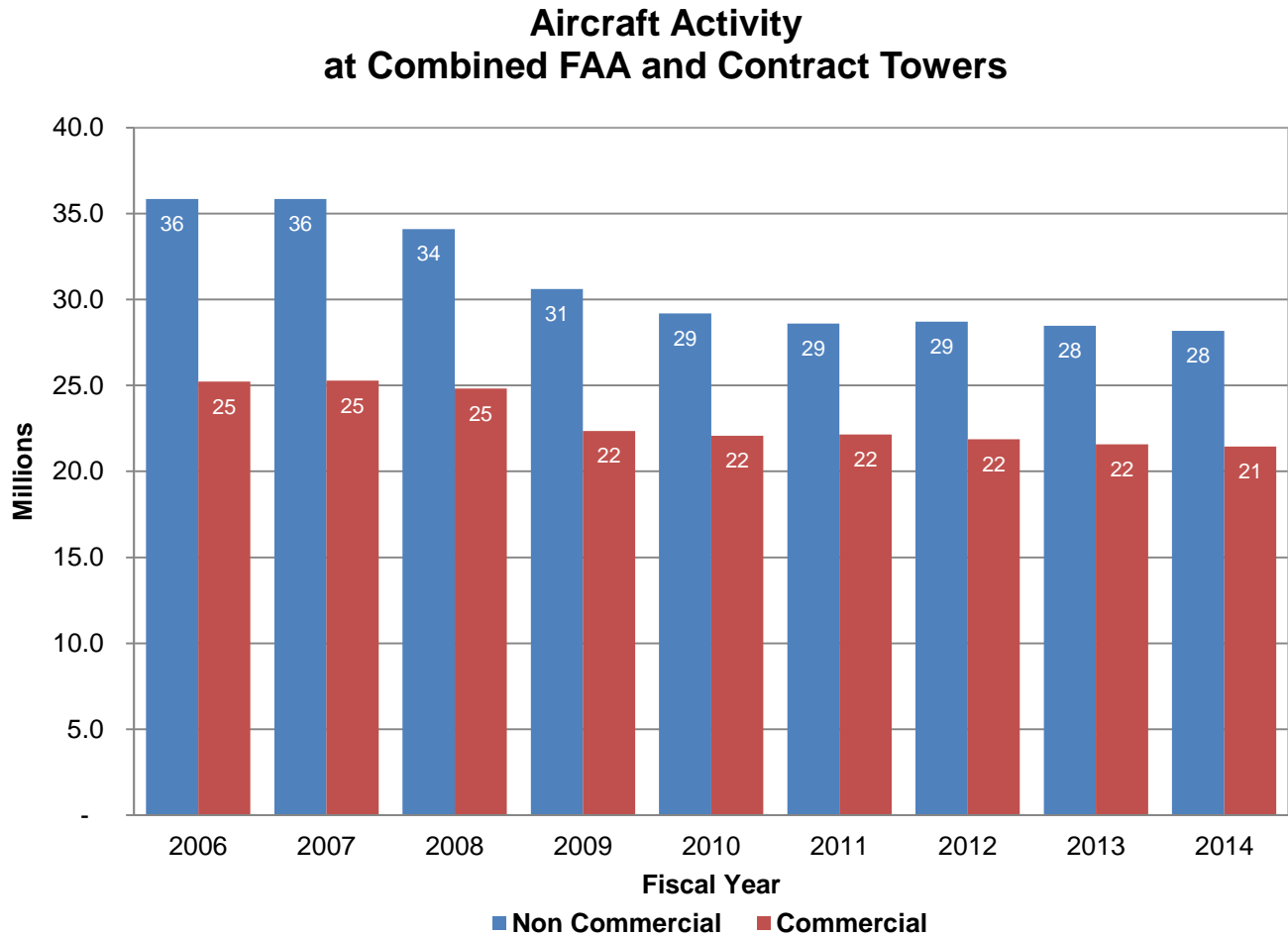
FAA OPERATIONS

In 2014, activity at FAA facilities declined for the seventh consecutive year. Commercial air traffic activity fell for the sixth time in seven years as increases in air carrier activity were more than offset by declines in air taxi activity. Noncommercial activity also declined as both general aviation and military levels fell. The decline in annual totals were driven primarily by the impacts of the unusually severe weather in January-March 2014 quarter, as total operations at FAA and contract tower airports posted year over year gains in six of the remaining nine months of FY 2014.

Total activity at combined FAA and contract tower airports (the set of 516 towers where FAA provides service, ranging from Chicago O'Hare (the busiest with 879,000 operations) to towers with as few as 7,200 operations (Branson, MO) was 49.6 million operations in 2014, down 0.9 percent from 2013 and 27.8 percent below the peak activity level recorded in 2000. In 2014, commercial activity (the sum of air carrier and commuter/air taxi) at combined FAA and contract towers fell by 0.6 percent. Air carrier operations were up 1.9 percent while commuter/air taxi operations declined 4.1 percent. Commercial operations in 2014 were 17.7 percent lower than their peak in 2005.

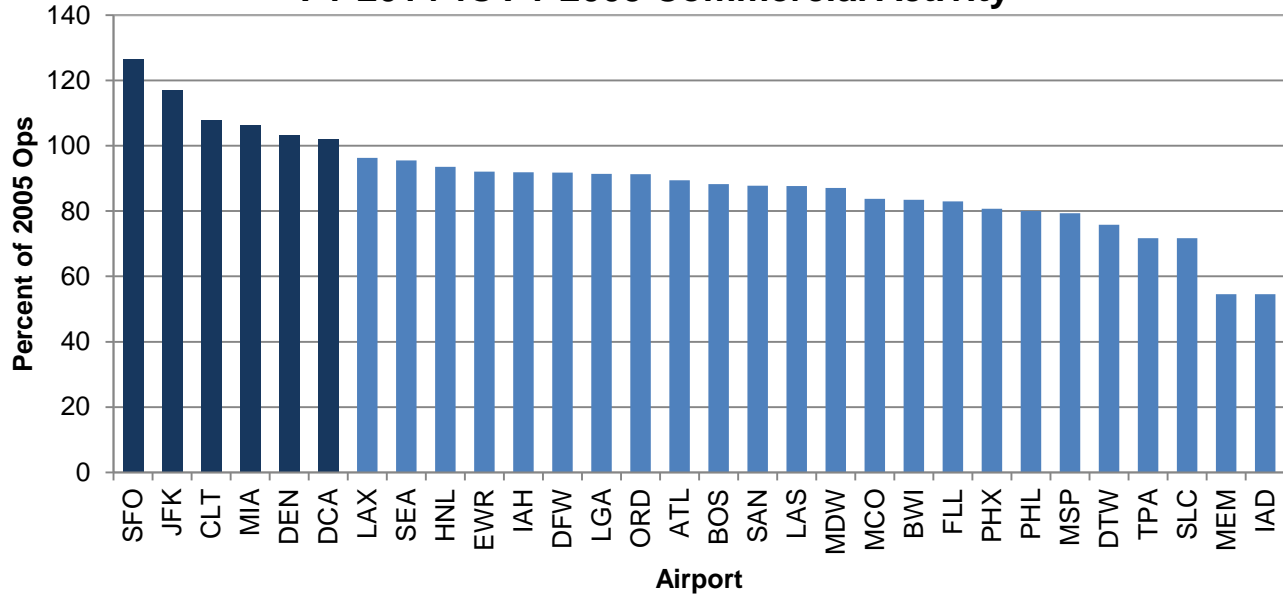
Non-commercial activity (the sum of general aviation and military) at combined FAA and contract towers decreased 1.1 percent in 2014 after a 0.8 percent decrease in 2013. General aviation activity (25.6 million) was down 1.1 percent while military activity (2.5 million) was down 1.4 percent. At the end of 2014, non-commercial aircraft activity was 34.1 percent below the activity in 2000.

In FY 2014, total operations at the large hubs decreased by 0.5 percent to 12.5 million, and constituted 25.2 percent of all towered operations. Activity at the medium hubs fell by 1.6 percent to 4.9 million while activity at the small and non-hub towers decreased by 1.1 percent, from 32.6 million to 32.3 million. The share of total towered operations at the medium, and small and non-hub towers in FY 2014 were 9.8 and 65.0 percent, respectively. Since 2000, operations at large hubs have declined by 13.3 percent, while operations at medium hubs have fallen by 42.8 percent, and operations at small and non-hub towers have declined by 29.5 percent.



The FAA pays close attention to the trends occurring at the “Core 30” airports. These airports represent the top 30 airports in the country in terms of passenger activity (except Memphis which is a major freight hub) and account for about 70 percent of commercial passengers. Commercial activity at the Core 30 airports peaked in 2005, but subsequent industry restructuring has resulted in a drop in combined commercial activity at these airports since then. In 2014, commercial activity at the Core 30 airports fell by 0.9 percent from the previous year and was 11.1 percent below 2005 activity levels. Of the Core 30 airports, ten recorded increases in activity from 2013 with the largest increases occurring at Seattle (up 6.1 percent) and Honolulu (up 5.2 percent). The largest decreases in activity occurred at Memphis (down 10.9 percent), and Detroit (down 6.3 percent). Only six of the Core 30 airports exceeded 2005 peak activity levels during FY 2014, unchanged from the number in prior three years.

Only Six of the Core 30 Airports Are Above 2005 Activity Levels FY 2014 vs FY 2005 Commercial Activity



Since 2005 there has been a pronounced shift in demand which is reflected in the relative growth of commercial operations across the Core 30 airports. Commercial operations at San Francisco (up 26.7 percent), New York-Kennedy (up 18.5 percent), and Charlotte (up 8.0 percent) have increased the most relative to their 2005 activity levels. Commercial operations at Dulles (down 45.5 percent) and Memphis (down 45.4 percent) have shown the largest declines from 2005 levels. These activity level shifts reflect the impact of airline industry restructuring. The demise of Independence Air and United's continuing restructuring of its network resulted in a dramatic reduction of operations at Dulles; while the bankruptcy of Delta, its subsequent merger with Northwest, and the restructuring of the combined network has led to a dramatic shrinking of operations in Memphis.

Non-commercial activity, 91 percent of which is in general aviation, decreased 1.1 percent in 2014 with general aviation activity falling by the same amount. Breaking down the general aviation activity by hub size, general aviation activity at large hubs and medium hubs rose by 1.5 and 1.3 percent, respectively, while activity at small and non-hubs decreased by 1.2 percent. However, general aviation activity at all hub categories has fallen substantially since 2005, down 39.5, 37.8, and 28.4 percent, respectively, at large, medium, and small/non hubs. Rising fuel prices, stagnant household incomes, falling household wealth, and a shrinking pilot population are all viewed as contributing to the long run decline in general aviation activity.

In 2014, total activity at FAA en-route centers (41.3 million) increased for the first time since 2011, up 3.5 percent from 2013 levels, and 12.9 percent below their peak in 2005. Commercial activity increased 2.9 percent with air carrier aircraft handled up 4.7 percent while commuter/air taxi aircraft handled fell 1.9 percent, respectively. Non-commercial activity was up 5.6 percent for the year as general aviation activity went up 4.7 percent while military activity increased 9.2

percent. In 2014, air carrier operations were 2.9 percent below their 2005 activity levels and air taxi/commuter operations were 15.4 percent below activity levels for 2005. Operations for the general aviation and military user groups were 19.5 and 54.8 percent below their 2005 activity levels, respectively.

Aircraft Handled at FAA En Route Centers

